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AGRICULTURE, RURAL DEVELOPMENT, AND RELATED AGENCIES APPROPRIATIONS FOR FISCAL YEAR 1989

HEARINGS

BEFORE A

SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS UNITED STATES SENATE

ONE HUNDREDTH CONGRESS

SECOND SESSION

ON

H.R. 4784

AN ACT MAKING APPROPRIATIONS FOR AGRICULTURE, RURAL DEVELOPMENT, AND RELATED AGENCIES PROGRAMS FOR THE FISCAL YEAR ENDING SEPTEMBER 30, 1989, AND FOR OTHER PURPOSES

PART 2 (Pages 1–718)

COMMODITY FUTURES TRADING COMMISSION
DEPARTMENT OF AGRICULTURE
FARM CREDIT ADMINISTRATION
FARM CREDIT SYSTEM ASSISTANCE BOARD
FOOD AND DRUG ADMINISTRATION

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AGRICULTURE, RURAL DEVELOPMENT, AND RELATED AGENCIES APPROPRIATIONS FOR FISCAL YEAR 1989

THURSDAY, MARCH 24, 1988

U.S. SENATE,
SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS,
Washington, DC.

The subcommittee met at 10:12 a.m. in room SD–138, Dirksen Senate Office Building. Hon. Quentin N. Burdick (chairman) presiding.

Present: Senators Burdick, Sasser, Harkin, Specter, and Grassley.

FARM CREDIT ADMINISTRATION

STATEMENTS OF:

FRANK W. NAYLOR, JR., CHAIRMAN OF THE BOARD
JIM R. BILLINGTON, MEMBER OF THE BOARD
MARVIN R. DUNCAN, MEMBER OF THE BOARD

OPENING REMARKS

Senator BURDICK. Good morning, ladies and gentlemen. Welcome to the committee. Today, we will be hearing from members of the Farm Credit Administration, and we will review its budget request. With us is Mr. Frank Naylor, Chairman of the Board, and the two other members of the Board, Mr. Marvin Duncan and Mr. Jim Billington.

The budget request for fiscal year 1989 is $38,100,000. This is a $3,100,000 increase over the amount provided in fiscal year 1988.

The Farm Credit Administration is the regulator of the Farm Credit System, which is comprised of 12 federal land banks, 13 banks for cooperatives, and approximately 382 federal land bank and production credit associations.

In each of the last 3 years, the Farm Credit System has seen significant federal legislative changes. As a result, the legislation around these system institutions has become extremely complicated. We have seen the Capital Corporation come and go; we have seen provisions for a direct federal appropriation come and go; and now we are faced with the possibility of the issuance of federally guaranteed bonds in order to raise money for the system and are faced with the federal government providing the interest expense of these bonds.

With that, in addition to reviewing budgets for the Farm Credit Administration, I hope that we can clarify some of the issues that are raised today in terms of the Farm Credit System. It has had a very rocky recent past, and Congress is very intent upon maintaining the system on a firm financial basis.

We have each of the Board members' statements which will be made a part of the record. I note that they are rather lengthy, so I will ask the members of the Board to summarize them.

Do you have a statement, Senator Grassley?

Senator GRASSLEY. Mr. Chairman, I do not have a statement, and I think I am going to be able to be here to ask the questions of the Board that I want to ask, but because I do have to be upstairs sometime this morning to help make a quorum for Judiciary, I would like to know if I could submit them in writing in case I can't be here?

Senator BURDICK. Certainly.

Our first witness this morning is Mr. Frank Naylor.

STATEMENT OF MR. NAYLOR

Mr. NAYLOR. Thank you, Mr. Chairman. It is a pleasure to appear before you today. I would like to comment on the Farm Credit Administration, and my colleagues will comment more directly on their activities.

In 1987, the Farm Credit Administration completed its first full year of examination and enforcement activity as specified by Congress in its reorganization of the agency in the previous year. More than 400 system institutions were examined by the end of 1987 compared to 40 by yearend of 1986. Since the passage of the Farm Credit Amendments Act of 1985, the agency has placed 41 enforcement actions which have been approved by the FCA Board and are in effect.

None of these enforcement actions approved by the Board to date have been terminated; 11 of the Farm Credit districts have institutions with enforcement actions in place; cease and desist orders have been issued in 13 PCA's—four credit banks and seven land banks. Formal agreement with regard to change of practice and procedure identified through examination have been signed by 13 PCA's, one bank for cooperatives, one federal land bank, and two FICB's.

There are 11 supervisory letters identifying the practice or procedures that needed corrective action. They have been transmitted to Farm Credit System service organizations.

In addition, the agency has several actions in process, including cease and desist orders in nine PCA's, one land bank association and one additional land bank. Last, three of these orders are in litigation, two with PCA's and one with the Federal Land Bank.

The system has proceeded to put in place the necessary regulatory changes to the extent that that was required from the 1985 act and, in addition to that, is involved currently at this stage in over 46 lawsuits that have at least some involvement with the Farm Credit Administration. Many of these, of course, are more directly involved in system institutions.

STATUS OF LITIGATION

Twenty-one lawsuits have been filed by various Farm Credit institutions that seek further transfer of funds from financially stronger institutions to those requiring assistance. Those would also involve the old Farm Credit System Capital Corporation. Seven lawsuits related to foreclosure have been filed that include FCA as a party and are still pending. Four lawsuits have been filed and are pending charging the FCA's regulatory accounting practices, deprivation issues, and other related issues.

There have been a number of lawsuits filed just recently with regard to the Agricultural Act of 1987. They deal with the one-time stock purchase that was provided for by the Congress that would go to the Farm Credit System Financial Assistance Corporation Trust Fund. The hearings that have been held in federal district courts requesting temporary restraining orders have been denied in each case. There are actions before the District of Columbia's Circuit Court.

The agency has had two formal public hearings during calendar year 1987 to extend an opportunity for the public to be involved in input in the regulatory process, and my statement summarizes a number of agency and Board activities during the course of the year.

As required by the Agricultural Act of 1987, the FCA Board has approved the charter of the Farm Credit System Financial Assistance Corporation. The FCA Board has approved charter documents for the Farm Credit System Assistance Board, has revoked the Farm Credit Systems Capital Corporation Charter, and has approved a mission statement for the agency.

FCA BUDGET

With regard to the budget specifically, Mr. Chairman, as you know, our budget is approved by Congress but comes to the U.S. Treasury through an assessment of the regulated institutions of the Farm Credit System. The FCA budget, therefore, does not draw on the tax dollars of the nation, but comes back to the agency in the form of an operating expense to the regulated institutions.

Since our budget constitutes an additional expense to the system, we are keenly aware of our responsibility to bear our cost and to contain and control our costs as much as we can. The Board approved a budget proposal for fiscal year 1989 of $38.1 million. During fiscal year 1987, the FCA completed the staff expansion resulting from the 1985 act to examine production credit and land bank associations and to execute the regulatory role mandated by the Farm Credit Act of 1971 and amendments of 1985.

The full-time permanent staff has increased from 444 at the start of fiscal year 1987 to 519 at yearend. Fiscal year 1988 was the first year the full impact of this increased staffing level was reflected in the budget figures.

In an effort to reduce costs, no increase in FCA staff is proposed for fiscal year 1989, and as you know, Mr. Chairman, the Farm Credit Act Amendments of 1985 mark the initiation of a period of significant change for the agency. A strengthening of the agency's financial regulator role and a concurrent expansion of the agency's examination activities resulted in the employment of many new examiners and the establishment of seven new field offices.

There are a substantial number of entry-level examiners who are now coming to full qualification. With that in mind, our FCA operating cost for fiscal year 1989 could be summarized basically as follows: Of the $38 million agencywide, $22.8 million represents salary costs and $4.6 million represents the corresponding benefit expenditures. The 300 examiners in the FCA spent 75 percent of their time in travel status.

In anticipation of inflated costs or increased costs in travel, the budget increase includes the resources to relocate many of our examiners closer to their work assignments. The travel budget is $4.8 million in the proposed budgets.

In total, the basic expenditures reflecting travel, salary, and benefits comprise 85 percent of our proposed budget. There is some minor upgrading of our automated data processing equipment included in this budget, and there is a budget item for $2.4 million that includes the remainder of all other services not previously identified and includes such items as equipment repair, maintenance, telecommunications network in the field offices, and payments to the U.S. Treasury for payroll-related services.

As I reported to the subcommittee last year, Mr. Chairman, I have continued my directive to the agency's administrative staff to identify all possible additional sources for cost reductions and neutralization of any additional costs. All agency operations are funded by assessments against the institutions in the Farm Credit System. Obligations are incurred within fiscal year budgets as approved by the Farm Credit Administration's Board.

Mr. Chairman, this completes a very brief summary of the major activities and budget request of the agency. I would be happy to answer yours or other members' questions as we proceed.

PREPARED STATEMENT

Senator BURDICK. Thank you. We have your complete statement and it will be made part of the record.

[The statement follows:]

STATEMENT OF FRANK W. NAYLOR, JR.

MR. CHAIRMAN, and members of the subcommittee, it is a pleasure for me to appear before you today with the members of the Farm Credit Administration Board to give you an overview of the nonappropriated budget of the Farm Credit Administration for the next fiscal year. In addition, I will present an update of the agency's activities since last we met.

FARM CREDIT SYSTEM CONDITIONS

When we appeared before your subcommittee a year ago we were in the early stages of becoming a Federal financial regulator as prescribed by the Farm Credit Amendments Act of 1985. While FCA was writing regulations for this law and building staff to annually examine each Farm Credit System (System) institution, Congress approved the 1986 Amendments allowing regulatory accounting practices (RAP).

At that time we informed your subcommittee that it was our opinion that legislative options to restore the strength and viability of the Farm Credit System should be explored. The condition of the System then, combined with financial forecasts for the year, suggested that as many as four of the large Federal land banks could have no net worth by the end of 1987. Congress responded to our warning and by April legislative hearings were being held in both the House and Senate to seek lasting solutions to the Farm Credit System's financial crisis.

Beginning with the second quarter of 1987 through the end of the year, however, the System's reported financial condition showed substantial improvement. But much of the change was traced directly to the reversal of loan loss reserves.

LOAN LOSS RESERVES

As you know, Mr. Chairman, financially troubled System institutions are required to set aside reserves for protection against probable future losses. According to the System, the projections for necessary reserves have been too high. Based on a review of the current agricultural economic environment and its impact on System borrowers, $1.994 billion in loan loss provisions have been reversed and added to the System's net income in 1987.

ECONOMIC CONDITIONS

There are a number of factors that contributed to the System's improved projections--some of them technical, some of them a result of changes in the general agricultural economy. For example, net cash farm income rose for the fourth straight year in 1987 to a record $57 billion. This increase reflects large Federal supports, lower operating costs, and a strong year for livestock producers.

There has been a record pay-down of agricultural debt by producers from a peak in 1983 of $193 billion to $141 billion at the end of 1987 as farmers continue to pare down their exposure in the money markets.

This also is consistent with the System's downward trend in outstanding loan volume, which was about $50 billion into the third quarter of 1987 and continued to trend downward through the end of the year. For comparison, in the early 80's loan volume reached a high point of about $78 billion.

Farmland values are estimated to be up--ranging from $15 to $25 billion for 1987. This is the first upturn in a number of years and the trend is expected to continue through 1988--a very positive sign, both for the agricultural economy and for those who provide agricultural credit.

Based on these economic reports, System institutions began aggressive loan loss reserve reversal activity, which was largely responsible for the profits reported in the second and third quarter and yearend conditions for 1987. It is also the major reason for the reported $17 million loss for 1987 compared to the FCA projection of $1.4 billion in losses and the System's own estimate of $1.2 billion. As we said after the third quarter report, these favorable figures do not negate the fact that the System still has recurring problems in its overall income statement.

FARM CREDIT SYSTEM'S 1987 REPORT

As of December 31, 1987, the System reported a full year net loss of only $17 million compared to a net loss for 1986 of $1.916 billion.

Net interest income was adversely affected in 1987 as a result of substantial nonearning assets and declines in loan volume and a continued narrowing of the margin between the amount on interest received over interest paid for funding. In fact, the land bank system operates with a deficit net interest margin, meaning it pays a higher average interest rate than it receives. Net income for the year was $509 million compared to $781 million for 1986. Without allowance for loan losses reversals, the System would have lost $1.485 billion.

Loan volume continued to decline from $58.2 billion reported by the System at yearend 1986 to $52.5 billion at yearend 1987.

On the positive side, nonaccrual loans decreased from $7.006 billion to $5.234 billion, or about a $1.8 billion improvement in performance. Other high risk loans, which still accrue interest but have been identified as potential problem loans, also decreased from $5.742 to $4.273 billion during the same period.

Other property owned by the System, acquired primarily through foreclosure actions, declined to $876 million, below the 1986 level of $1.1 billion and the 1985 figure of $928 million. Earnings on such property, however, also declined substantially from $233 million in 1986 to only $12 million in 1987.

SYSTEM OVERHEAD

The spread between interest earned on loans compared to funds necessary to cover day-to-day operating costs continues to deteriorate. This is a major problem for the System. The institutions, in many cases, are not earning enough money on their loans to cover their costs of doing business. The shortfall continues to broaden as it has over the past several years. It is our opinion that the System must aggressively deal with its noninterest expenses even with the new Agricultural Credit Act of 1987 in place.

AGRICULTURAL CREDIT ACT OF 1987

Mr. Chairman, because of your close association with agriculture, I know you have a full understanding of the enormity of the difficulty faced by the Congress in forging the Agricultural Credit Act of 1987. What evolved from the Congress is a measure that reflects an enormous amount of compromise. But within the Act, arguably, the tools are more than adequate to correct the System's problems if, and I emphasize if, it uses them.

Congress elected in the Act to leave a great deal of the System's future in the hands of its borrower/stockholders instead of dictating activity in the form of Federal law.

Now, I would like to briefly review what the Act means to the Farm Credit System and its member borrowers.

THE BORROWER/STOCKHOLDER

From the producer's perspective, the 1987 Act guarantees the stock of existing borrowers and new stock issued prior to October of this year. This provides a transition period in which the individual institutions make a decision about the approach they will use to provide their capital base for the future. There is an absolute necessity for System institutions to develop what they desperately need--permanent capital.

BORROWER RIGHTS

The measure also provides some extensive borrower rights for individual producers. These provide a number of guarantees which you as lawmakers believed only constituted good business practices, but which were not being followed by System institutions. As a result, some of the strenuous borrower rights within the law are already being looked at by various agricultural organizations and operators as to the impact they will have on the rights of individual producers.

The law also provides the assurance to investors that is crucial to the System's continued access to the bond markets by clarifying the "agency status" of the System. There is every reason to believe that there will continue to be a strong market for Farm Credit System securities. The Act has addressed this question quite well. We share the expectation of the Congress that producers will continue to be assured a substantial pool of credit as a result of this law, with the System continuing to provide funding on a national basis. In addition, the availability of credit is expanded even further with the creation of a secondary market for agricultural mortgages.

Currently, the System continues to have an unacceptably high level of nonperforming loans and operating overhead. The new borrower rights provisions, which can have an important positive benefit for producers still facing troubled loans, will have significant attendant costs to the System. It is a cost which the producer/ borrowers, who are also stockholders, will have to cover. For this reason I would expect stockholders to scrutinize their institutions closely to determine if they are operating at optimum efficiency. Institutions must apply the new borrower rights provisions in the most cost-efficient ways possible or they could substantially impact their market position. The importance of this can't be overemphasized.

BUSINESS PRACTICES

Mr. Chairman, there are some things the Act does not do. It does not guarantee the survival of any particular institution within the Farm Credit System. Indeed, it does not guarantee that the System will fully recover or that it will remain viable. Yet there is a series of steps provided in the law through the creation of the Farm Credit System Assistance Board to ensure that System institutions will have every opportunity to turn problem situations around. But if those efforts fail, the option is still available for the Assistance Board to recommend that an institution be liquidated. That is an important incentive, I think, to the shareholders, management, and directors of these institutions to undertake and use the authorities given them to regain their competitive stature.

SECONDARY MARKET

When you add the probable impact of the secondary market to borrower rights, the System has a new operating environment and a new level of competition it has never faced before. The success of the individual institutions to perform in that environment--to compete and offer services at prices producers will accept--is going to be a real challenge. So, in addition to stockholder pressure, significant competitive pressure is created through this Act to curtail costs and be competitive in terms of overhead and operating expenses.

For the producer this could be a real plus. The secondary market could provide additional market competition for sound real estate lending. It opens a new channel of agricultural credit and gives producers increasing confidence that they will have a reliable, competitive source of credit over the long term. I would add, however, that the underwriting standards are very strong. There should be no misunderstanding. The secondary market has nothing to do with problem loans and will provide no help or assistance for nonperforming loans. The subcommittee should know, and I believe the members understand, that the secondary market is targeted at quality credit.

RESTRUCTURING OF THE SYSTEM

In its wisdom, Congress correctly decided that, except for the merger of the Federal intermediate credit banks and the land banks, it would leave the decisions of how to more efficiently restructure the System in the hands of its owners--the farmer/borrowers. The merger of the Federal intermediate credit banks and the land banks in each district to Farm Credit Banks is required to be accomplished within 6 months of enactment of the Act. Any further restructuring is left up to the stockholders and there are significant potential changes that can occur. For example, the Federal land bank associations (FLBAs), in the past, have only been lending agents of the Federal land banks. Under the 1987 Act that can be changed and FLBAs could take on the same role as production credit associations (PCAs)--standing alone and acting as direct lenders obtaining their funds from the district bank the way the PCAs do. This would be a dramatic change, structurally, even if an FLBA opted to act within its own framework. The other most significant opportunity for change, after the merger of each district FICB and FLB, is the possible merger of the PCAs and the FLBAs offering a full range of agricultural lending services. This would be a major change that gets to the basic, underlying fabric of the entire System and its history. It would be one of the most fundamental changes the System has ever seen. But it is all at the discretion of the ownership.

The Act was also specific about the restructuring of banks for cooperatives (BCs) in the Farm Credit System. It encourages the development of a National Bank for Cooperatives through merger and agreement with the existing Central Bank for Cooperatives and district banks for cooperatives. If two-thirds of the BCs and the Central Bank are merged they will have unlimited territorial credit service authority throughout the country.

The bottom line is, what you will probably see is a very mixed set of institutions not recognizable as the historically known Farm Credit System.

FARM CREDIT ADMINISTRATION
EXAMINATION AND ENFORCEMENT

In 1987 FCA completed its first full year of examination and enforcement activity as specified by Congress in its reorganization of the agency the previous year. More than 400 Farm Credit System institutions were examined by the end of 1987 compared to 40 for yearend 1986.

Since passage of the Farm Credit Amendments Act of 1985, which gave the Agency enforcement action authority, a total of 41 enforcement actions have been approved by the FCA Board and are in effect. None of the enforcement actions approved by the FCA Board to date have been terminated. Eleven of the 12 Farm Credit districts have institutions with enforcement actions in place.
Cease and Desist Orders have been issued for 13 PCAs, 4 FICBs, and 7 FLBs. Formal agreements to change a practice or procedure identified through examination have been signed by 13 PCAs, 1 BC, 1 FLB, and 2 FICBs.

Eleven Supervisory Letters identifying a practice or procedure that needed corrective action have been transmitted to Farm Credit System service organizations. In addition, the FCA has several actions pending, including Cease and

Desist Orders in nine PCAs, one FLBA, and one FLB. Lastly, three of these orders are in litigation, two PCAs and one FLB.

REGULATIONS

The Farm Credit Act Amendments of 1985 reorganized the Farm Credit Administration, retiring the 13-member part-time Federal Farm Credit Board and its Governor. In its place, Congress established a three member board, one of the Board members serving as Chairman and Chief Executive Officer for the agency. All three members are appointed by the President. In addition, the agency was reorganized and given responsibilities and authorities similar to other Federal financial regulators, including regulatory authority. The following are the proposed and/or finalized regulations issued by the Farm Credit Administration since our last appearance before the subcommittee.

Two regulations implementing the Farm Credit Amendments Act of 1985 were approved by the FCA Board. They were:

- The Farm Credit System Capital Corporation Organization, effective May 20, 1987; and,
- Loan Policies and Operations - Borrower Rights, effective April 15, 1987.

One proposed regulation implementing the 1985 Amendments was published in the Federal Register April 24, 1987, and would have changed the organization of the Farm Credit System Capital Corporation Funding.

Two regulations dealing with the Farm Credit Act Amendments of 1986 were issued implementing Farm Credit System regulatory accounting practices, effective December 24, 1986.

An FCA regulation, The Enforcement of Nondiscrimination on the Basis of Handicap in the Farm Credit Administration, has been approved by the Justice Department pending the filing of paperwork.

Also a regulation to guarantee information security became effective May 14, 1987.

PENDING LITIGATION

At the date of this testimony there were over 46 lawsuits pending that involved the Farm Credit Administration.

Twenty-one lawsuits have been filed by various FCS institutions that seek to prevent the transfer of funds from financially stronger Farm Credit System institutions to those requiring financial assistance by challenging one or more of the following issues: the FCS Capital Corporation statute, FCA's Capital Corporation assessment regulations, FCA's Capital Directive No. 1, or the Inter-System transfer of funds regulation.

Seven lawsuits related to foreclosure have been filed that include the FCA as party and are still pending.

Four lawsuits have been filed and are pending that challenge FCA's regulatory accounting practices regulations and/or regulations prohibiting reversal of contributions made by System institutions under capital preservation agreements.

Two suits are pending that allege impairment of equities of other financial institutions (OFIs) affiliated with the Farm Credit System as a result of capital preservation agreements and/or assessments by the Capital Corporation.

One lawsuit remains alleging a failure by the FCA to issue borrower rights regulations, and another challenging the reversal of capital preservation agreement accruals for the third quarter of 1986.

Also, Mr. Chairman, the first challenge(s) of the Agricultural Credit Act of 1987 have been filed. They deal with the one-time stock purchase that will fund the Farm Credit System Financial Assistance Corporation's Trust Fund established to assist troubled institutions. At the hearings held in the respective Federal district courts, requests for temporary restraining orders were denied on the basis of jurisdictional limitations. Actions filed in the District of Columbia Circuit Court of Appeals were also denied.

There are also five other suits on miscellaneous issues.

OTHER SIGNIFICANT FCA BOARD ACTIONS--1987 TO PRESENT

The Farm Credit Administration held two formal public hearings during calendar year 1987. They were:

- February 26, on Regulatory Accounting Practices (RAP) regulations that were approved by Congress with the Farm Credit Act Amendments of 1986; and,
- April 7, on regulations governing disclosure requirements for directors of Farm Credit System institutions.

At FCA Board meetings the following actions were taken:

- April 7, approval of directives establishing a new system for rating the financial condition of Farm Credit System institutions.
- April 17, exceptions to the FCA regulations governing the agency's approval of FICB direct loans to PCAs where the loan margin exceeds the regulatory limit.
- May 5, a resolution supporting a legislative solution to the Farm Credit System's business problems.
- At a special Board meeting May 19, authorized Federal land banks to activate capital stock reductions, under certain conditions, without FCA prior approval.
- July 1, adopted a policy with respect to approval of Farm Credit System institution salary ranges and compensation for chief executive officers.
- August 18, clarified a policy with respect to loan documentation requirements for borrower financial statements on loans made on or after September 1, 1986.
- August 18, adopted a policy that limits the scope of Federal land bank association examinations, implementing a requirement of the Farm Credit Amendments Act of 1985.

The Board also carried out a budget review and approved revised FCA budgets for fiscal years 1988 and 1989. The Fiscal Year 1988 budget was reduced by more than $3 million, or 7.65 percent, of the FY 1987 budget of $39,420,267. The FY 1989 budget of $38,099,877 is 3.3 percent below the approved FY 1987 budget.

As required by the Agricultural Credit Act of 1987, the following actions were taken by the FCA Board:

- January 11, 1988, approved the charter and articles of incorporation for the Farm Credit System Financial Assistance Corporation.
- January 11, approved an amendment to the loss-sharing agreements regulation permitting the conversion of third quarter 1986 loss-sharing accruals into obligations of the new Assistance Corporation.
- January 12, approved documents chartering the Farm Credit System Assistance Board and revoking the Farm Credit System Capital Corporation's charter, effective January 21, 1988.
- February 2, approved the Statement of Mission of the Farm Credit Administration.

FCA BUDGET

Now, Mr. Chairman, I would like to take a few moments to give the subcommittee an overview of the budget needs of the Farm Credit Administration. As you know, our budget is approved by Congress but comes to the U.S. Treasury through an assessment of the regulated institutions of the Farm Credit System. The FCA budget, therefore, does not draw on the tax dollars of the Nation, but comes back to the agency in the form of an operating expense to the regulated institutions. Since our budget constitutes an additional expense to the System, we are keenly aware of our responsibility to control our costs as much as we can.

The Farm Credit Administration Board has approved an amount of $38,100,000 for FY 1989.

During FY 1987, the FCA completed the staff expansion required to examine the land bank/production credit associations and to execute the regulatory role mandated by the Farm Credit Amendments Act of 1985. The full-time permanent FCA staff increased from 444 at the start of FY 1987 to 519 at yearend. In FY 1988 the full year impact of this increased staffing level is reflected in both the FTE and budget figures.

In an effort to reduce costs, no increase in FCA staff is proposed for FY 1989.

As you know, the Farm Credit Amendments Act of 1985 marked the initiation of a period of significant change for the agency--a strengthening of the agency's financial regulator role, and a concurrent expansion of the agency's examination activities resulting in the employment of new examiners and the establishment of seven new field offices.

The substantial number of entry-level FCA examiners hired in the latter part of FY 1986 and during FY 1987 is continuing to grow toward the full performance level. As the agency assumed the responsibilities directed by the Congress in the amendments to the Farm Credit Amendments Act of 1985, the authorized examination staff more than doubled. The majority of this new workforce was hired at the entry level and most examiner replacements now are hired at this level. The relatively large group of examiners hired during FY 1986 and FY 1987 have been extensively trained and have assumed increasingly more responsible assignments since they were appointed. The successful examiners in this group will achieve the full performance level in FY 1989--the final increment in a career pattern for all examiners before sitting for certification to enter the ranks of commissioned examiner. The budget increase in personnel compensation reflects another major adjustment in personnel costs which began 3 years ago.

Since my appointment as FCA's Chairman, I have taken a close look at existing agency policy and I have instituted policy changes wherever economies could be realized.

FCA's operating costs for FY 1989 can be summarized as follows:

Of the $38,100,000 agencywide total, $22,861,000 represents salary costs, with an additional $4,636,000 reflecting the corresponding benefit expenditures. Recent changes in benefit entitlements for newly hired Federal employees have coincided with our hiring efforts in support of our field examination responsibilities.

Because performance of our regulatory role requires constant travel to Farm Credit System institutions for our examination and supervisory staffs, the travel allocation represents the frequency of our travel needs. The more than

300 FCA examiners spend 70 percent or more of their time in travel status. In addition to the anticipated inflation in travel costs, the budget increase includes the resources to relocate examiners closer to their work assignments in the institutions of the Farm Credit System as structural changes in the System occur as directed or allowed by the Congress in the Agricultural Credit Act of 1987. Travel is budgeted in FY 1989 at $4,886,000.

Taken together, salaries, benefits, and travel comprise approximately 85 percent of the agency's FY 1989 budget.

The first and last major acquisition of automated equipment by FCA was in 1984. This equipment is now "mature" and requires replacement and enhancement in order to efficiently provide reliable and timely information to FCA examiners and supervisors, the Farm Credit Administration Board, and Congress. The budget increase to $1,181,000, up from $461,000 from FY 1988, reflects the replacement of mature equipment and computer workstations and a major enhancement to the agency's mainframe, which will increase capacity to match the need.

The remaining major category within the FCA budget is entitled Other Services. The budget cost for this category is $2,425,000 and includes the remainder of all other services not previously identified that are necessary for the efficient operation of the agency. These include equipment repair, maintenance, a telecommunications network with field offices, and payments to the U.S. Treasury for payroll related services, etc.

As I reported to the subcommittee last year, Mr. Chairman, I have continued my directive to the agency's administrative staff to identify all possible sources for cost reduction and neutralization.

ASSESSMENTS FOR OPERATING EXPENSES

All agency operations are funded by assessments against the institutions of the Farm Credit System. Obligations are incurred within fiscal year budgets as approved by the Farm Credit Administration Board.

This concludes the overview of the Farm Credit Administration's budget for FY 1989. I will be happy to answer questions on any specific issues the subcommittee may have.

STATEMENT OF MR. BILLINGTON

Senator BURDICK. Mr. Billington.

Mr. BILLINGTON. Mr. Chairman, I must apologize today for being on a rather tight time schedule. I do ask your indulgence to allow me to leave here by about 11:15. I am going up to Dickinson and Bismarck to speak to two stockholder meetings, Farm Credit Services stockholder meetings. I need to catch a plane in order to get there this evening. I look forward to that.

Senator BURDICK. Since you are going to North Dakota, we will forgive you. [Laughter.]

Mr. BILLINGTON. Thank you. Since our last meeting, the Farm Credit System has been reporting net operating losses on an increasing basis. These were reported at yearend and showed only minor losses in the system, but from a net operating income standpoint and from the net operating standpoint, the system did continue to lose money at an increasing rate.

The Federal Land Bank System reported a very small loss this year.

The 1985 and 1986 earnings reports showed huge losses. These also were due to allowance for losses accounts that were put rather high so that the system could clearly look at its loan portfolio and assess its assets so that in case there was a continuing decline in farm income, the system would be prepared to meet that crisis properly.

There have been some yearend activities which have occurred. Farm income has increased. We had improved livestock prices and improved weather conditions. At the yearend, it looked like land prices had gone up, so the system did book a negative provision which allowed a book earnings improvement. They reported last year, when we started holding these hearings, that they thought the system would lose approximately $1.4 billion during the year.

It looks like at yearend, they reported considerably fewer losses than that due to reversal of allowance for losses accounts. Our examiners will be looking at these allowance for losses accounts in the examination process.

ASSISTANCE BOARD

The Assistance Board was established this year and was given a clearcut purpose by the 1987 act to provide assistance and to protect the stock held by borrowers of Farm Credit System institutions from losses and assist in restoring system institutions to economic viability, permitting such institutions to continue to provide credit to farmers and ranchers and their cooperatives at reasonable and competitive rates.

This assistance will be provided by authorizing stock investments sufficient to return member equity to 75 percent of par value at the very beginning and to buy down the high cost of debt.

Looking at the system at the present time, the federal land banks' cost of money is averaging about 10.6 percent, and on 6-month securities they are selling in the 6-percent range, so that would be a dramatic change, there. Of course, these would have to be matched on longer term securities.

One of the roles that the Assistance Board performs in this act is to utilize any control that it deems necessary over management to cause system banks to correct some of the problems that are found. Now, for this reason, there have been system banks which are scrambling to try to avoid this assistance. This is positive from a cost of assistance standpoint, but it could be very costly to the borrowers from that entity.

In addition, institutions are financially stressed with high-cost debt, inefficient operations, and high-cost rates to farmers and ranchers that are bordering on the noncompetitive. On December 1, 1987, FCS had rates that were charged to FLBA borrowers from as low as 8 percent to as high as 16.5 percent, in one district on the default rate. There is a wide divergence and the new act states that one of its purposes is to provide credit assistance to farmers. I would like to discuss the very important and timely borrower rights provisions.

BORROWER RIGHTS

This part of the bill has some problems from the standpoint that there is concern about at what time this act is to engage, about how Congress intends to treat borrowers who were being foreclosed upon prior to January 6, 1988.

Also, on both an auction sale and private sale of the acquired property, how did Congress intend to give the right of first refusal to the last prior owner of inventoried properties? There are some major issues here, and there are differences in the way the system is allowed to handle private sales made between the institution and the previous owner and where sales are based on appraisals, and instances when acquired properties are auctioned off.

These are some questions that we are having difficulty with, and we are getting a lot of complaints from the system entities and from borrower/stockholders.

Section 414(c) should certainly alert the system lenders that both their boards and managements will be expected to work very closely with and assist distressed borrowers by using Farmers Home Administration guarantee programs and other available avenues as alternatives to foreclosure. There is a very strong statement to that effect in the 1987 act, and FCA examiners will be looking at this during exams.

Borrower rights has been considered a very heavy burden on many of the system borrowers who are paying their debts and who are current. They are, though, in nearly all districts, provided access to lower and differential interest rates programs, which, in many cases, vary 4 to 5 percent to those best borrowers.

Also, whenever loans can be restructured and the assets kept off the market, then land values are maintained at a reasonably sensible rate and the collateral on farms that does not have to be sold out will not be on the market, which would further impact the erosion we have seen in farm prices, land values, and other collateral.

I think that Congress, in this act, placed great emphasis on assistance to farmers, but also showed an understanding of the importance of having a cooperative farm credit system that is well-capitalized, efficiently directed and operated, and one that can provide dependable and affordable rates of interest to meet the credit needs of farmers, ranchers, and their cooperatives.

FCA REGULATIONS

So FCA is given the responsibility now to write regulations concerning this act, and we are on schedule as to what the act requires us to do. We have two very important regulations that we are in the process of writing now, and they include the capital adequacy regulations and the borrower rights regulations. We have both of those on our desks now, and we will have those approved by May 5, 1988.

In writing these capital adequacy regulations, it is going to be quite challenging to us, because we want to do this in a manner so as not to change the competitive stature of FCS institutions in their relationship to other private lenders. However, we want to make the regulations tough enough but not so tough as they might cause FCS institutions to be uncompetitive with private lenders out there.

So we have quite a job to do in writing those regulations. I have had a chance to review the borrower rights regulations and we will vote on those probably on May 5.

We do have a need for funding in the agency now because of the dramatic changes in the additional authorities that have been put on our shoulders, and I would hope that this meets with your approval, this budget that we are presenting. There are many serious problems out there that we still have. The system itself has a lot of problems. It is going to need assistance in the future. We are going to have the additional responsibility of assisting the Assistance Board with personnel and with information and examinations.

We have found that the system has some excellence in it. There are institutions that need no help, and we are happy to see that. They are getting along very fine. They are very good, strong, fine financial institutions. We found some that are extremely weak, and we are trying to move to correct problems in those entities.

It has been a pleasure to speak to you this morning, and thank you very much.

PREPARED STATEMENT

Senator BURDICK. Thank you. Your complete statement will be made part of the record.

[The statement follows:]

Statement of Jim R. Billington

Mr. Chairman and Members of the Subcommittee. I appreciate having this opportunity to appear before you to discuss what is occurring at the Farm Credit Administration.

I must apologize at the outset that I am required to leave this hearing by 11:30 a.m. in order to catch a plan to North Dakota where I have a long-standing commitment to speak to Farm Credit Association annual meetings in Dickinson tonight and Bismark tomorrow. Since I'll be in your State, Chairman Burdick, I hope you will indulge me on this matter.

Briefly, since we last met, Farm Credit System net operating losses have continued to mount. Despite what's been otherwise reported, System losses---from a net operating gain or loss standpoint---which is the bottomline---continue to deteriorate. Federal Land Banks are experiencing increasing net operating losses, and in the case of other System entities, there have been decreases in net operating earnings.

As Chairman Naylor reported, the big losses that were earlier estimated by the System were changed, not by net income from operations, but from institutions reversing allowance accounts and not charging current earnings for provisions for losses. Apparently, the capital and earnings accounts were sufficiently reduced in 1985 and 1986, as evidenced by the huge losses experienced by the System. Farm earnings improved, and land values stabilized, so that this yearend accounting, showing an improved System condition, could be booked. Hopefully, for

EVERYONE CONCERNED, THESE FAVORABLE ECONOMIC TRENDS WILL CONTINUE AND EVEN IMPROVE. ALSO, HOPEFULLY THE INDIVIDUAL SYSTEM ENTITIES ARE VERY CAREFULLY ANALYZING THE ADEQUACY OF THEIR LOAN LOSS RESERVE ACCOUNTS BECAUSE OUR EXAMINERS WILL BE.

THE AGRICULTURAL CREDIT ACT OF 1987 DIRECTLY AFFECTS THE ROLE AND RESPONSIBILITY OF THE FARM CREDIT ADMINISTRATION AND OUR COST OF OPERATION.

NEW FUNDING SOURCES AUTHORIZED BY THE ACT TO ASSIST TROUBLED INSTITUTIONS ARE TO BE FUNNELED THROUGH THE NEW FINANCIAL ASSISTANCE CORPORATION AT THE DIRECTION OF THE ASSISTANCE BOARD. THE ASSISTANCE BOARD WAS GIVEN A RATHER CLEAR-CUT PURPOSE TO PROVIDE ASSISTANCE TO AND PROTECT THE STOCK OF BORROWERS FROM FCS INSTITUTIONS AND TO ASSIST IN RESTORING SYSTEM INSTITUTIONS TO ECONOMIC VIABILITY, PERMITTING SUCH INSTITUTIONS TO CONTINUE TO PROVIDE CREDIT TO FARMERS AND RANCHERS AND THEIR COOPERATIVES AT REASONABLE AND COMPETITIVE RATES. ASSISTANCE WILL BE PROVIDED BY AUTHORIZING STOCK INVESTMENT SUFFICIENT TO RETURN MEMBER EQUITY TO 75 PER CENT OF PAR VALUE AND, VERY SIGNIFICANTLY, TO BUY-DOWN THE HIGH COST DEBT THAT IS NOW AVERAGING APPROXIMATELY 10.6 PER CENT (USUALLY HIGHER IN TROUBLED INSTITUTIONS) TO TODAY'S COST OF SIX-MONTH BONDS IN THE 6 PER CENT RANGE. THE SPECIAL POWERS AUTHORIZED INCLUDE ABOUT WHATEVER AUTHORITY THE ASSISTANCE BOARD DEEMS APPROPRIATE OVER MANAGEMENT AND COULD CAUSE SYSTEM BANKS TO SCRAMBLE TO AVOID ASSISTANCE. THIS IS POSITIVE FROM A COST OF ASSISTANCE STANDPOINT, BUT COULD BE COSTLY TO INDIVIDUAL BORROWERS IN DISTRICTS THAT ARE FINANCIALLY DISTRESSED WITH HIGH COST DEBT, INEFFICIENT OPERATIONS, AND INTEREST RATES TO FARMERS AND RANCHERS

BORDERING ON THE NON-COMPETITIVE. ON DECEMBER 1, 1987, RATES CHARGED FLB BORROWERS VARIED FROM AS LOW AS 8 PER CENT TO AS HIGH AS 16.5 PER CENT FOR LOANS IN DEFAULT.

HOPEFULLY, THE ASSISTANCE BOARD AND THE FARM CREDIT SYSTEM AND FCA CAN COOPERATE AND HELP PULL THE SYSTEM OUT OF ITS FINANCIAL AND OPERATING CRISIS.

FCA PROMULGATES THE REGULATIONS AND MANY OF OUR PRESENT REGULATIONS WILL REQUIRE A MAJOR OVERHAUL. ALSO, MANY NEW REGULATIONS MUST BE ISSUED.

SINCE THE PREAMBLE TO THE NEW ACT STATES THAT ONE OF ITS PURPOSES IS "TO PROVIDE CREDIT ASSISTANCE TO FARMERS. . ." I WILL BEGIN BY DISCUSSING THE VERY IMPORTANT AND TIMELY ISSUE OF BORROWERS' RIGHTS.

FCA'S ROLE IS TO WRITE THE REGULATIONS IN THIS SENSITIVE AREA TO ASSURE THAT BOTH THE INTENT AND LETTER OF THE LAW ARE CLEARLY UNDERSTOOD AND FOLLOWED BY SYSTEM INSTITUTIONS. WE WILL TRAIN OUR EXAMINERS TO ASSURE COMPLIANCE BY SYSTEM INSTITUTIONS AS REQUIRED. BORROWERS' RIGHTS REGULATIONS DIRECTLY RELATING TO REQUIREMENTS UNDER THE 1987 ACT ARE TO BE ON FCA BOARD MEMBERS' DESKS THIS WEEK SO THAT WE MAY REVIEW THEM THOROUGHLY AND TAKE ACTION IN ORDER TO MEET OUR MAY 5TH DEADLINE.

THE AGENCY, AND I AM SURE SOME OF THE SUBCOMMITTEE MEMBERS, IS GETTING A GREAT NUMBER OF COMMENTS ON BORROWERS' RIGHTS ISSUES AND THE WAY IN WHICH THE SYSTEM IN CERTAIN DISTRICTS IS

INTERPRETING THE ACT. THE TIMING OF WHEN THE ACT SHOULD ENGAGE, PARTICULARLY IN THE AREA OF ACQUIRED PROPERTY AND PENDING FORECLOSURES, IS NOT BEING UNIFORMLY APPLIED AMONG DISTRICTS. ONE OF THE PROBLEMS IS THAT THERE IS NO DATE CERTAIN AS TO WHEN THESE RIGHTS ARE TRIGGERED. THIS BRINGS UP TWO IMPORTANT QUESTIONS: HOW DID CONGRESS INTEND TO TREAT BORROWERS WHO WERE BEING FORECLOSED UPON PRIOR TO JANUARY 6, 1988? IN BOTH AN AUCTION SALE AND PRIVATE SALE SETTING HOW MANY TIMES DID CONGRESS INTEND TO GIVE THE RIGHT OF FIRST REFUSAL TO THE LAST PRIOR OWNER OF INVENTORIED PROPERTIES?

ANOTHER MAJOR ISSUE CONCERNS AUCTION SALES OF INVENTORIED SYSTEM PROPERTIES AND THE CONFLICTS BETWEEN SECTION 4.36 (B) AND (D). 4.36 (B), WHICH ADDRESSES PRIVATE SALES, CLEARLY AFFORDS THE LAST PREVIOUS OWNER A STRONGER NEGOTIATING POSITION THAN HE WOULD RECEIVE IN THE CASE OF A PUBLIC OFFERING UNDER 4.36 (D). IT WOULD BE MUCH EASIER TO WRITE REGULATIONS IF CONGRESSIONAL INTENT WERE CLARIFIED. THE SYSTEM IN MANY, BUT NOT ALL CASES, HAS DECIDED TO GO THE EXTRA MILE AND COOPERATE IN EVERY WAY WITH THESE PRIOR OWNERS. VERY FEW OF THE FARMERS WHO LOST THIS LAND CAN ACTUALLY BUY THESE PROPERTIES BACK SO THE OVERALL EFFECT IS RATHER INCONSEQUENTIAL. ALSO, WHERE THE SYSTEM CHOOSES NOT TO REFINANCE THE PRIOR MEMBER'S PURCHASE, IT COULD CONSIDER AT LEAST GIVING THE FARMER AS MUCH TIME TO ACQUIRE FINANCIAL COMMITMENTS FROM OTHER LENDERS AS REQUIRED OR AS MUCH TIME AS THE ENTITY CONCERNED TAKES IN MAKING ITS LOAN COMMITMENTS.

THE SENSE OF CONGRESS SECTION AT THE END OF 4.14C IS A VERY STRONG STATEMENT THAT FCA, IN OUR EXAMINATION PROCESS, SHOULD

CERTAINLY ALERT THE SYSTEM LENDERS (QUALIFIED LENDERS) AND BOTH THEIR BOARDS AND MANAGEMENT THAT THEY ARE ACCOUNTABLE TO WORK WITH AND ASSIST DISTRESSED BORROWERS BY USING FMHA PROGRAMS AND OTHER AVAILABLE AVENUES AS ALTERNATIVES TO FORECLOSURE.

BORROWER RIGHTS HAS BEEN CONSIDERED A HEAVY BURDEN TO THOSE BORROWERS WHO CONTINUE TO SERVICE THEIR DEBT. THE SYSTEM HAS ATTEMPTED TO RECTIFY THIS WITH DIFFERENTIAL INTEREST RATE PROGRAMS. WITH DIRECTION FROM CONGRESS MANY OF THE NON-ACCRUING AND RISKY ASSETS MAY BE RETURNED TO VIABILITY WITH FMHA GUARANTEES AND SHARED INTEREST RATE BUY-DOWNS. ALSO, MANY MORE PROPERTIES AND CHATTELS MAY BE KEPT OFF THE MARKET, THEREBY STABILIZING ALL FARMERS ASSETS.

THE CONGRESS, IN ITS WISDOM, PLACED GREAT EMPHASIS ON ASSISTANCE TO FARMERS BUT IT ALSO UNDERSTOOD THE IMPORTANCE OF HAVING A COOPERATIVE FARM CREDIT SYSTEM THAT IS WELL-CAPITALIZED, EFFICIENTLY DIRECTED AND MANAGED, AND ONE THAT CAN PROVIDE A DEPENDABLE AND AFFORDABLE RATE OF INTEREST TO MEET THE CREDIT NEEDS OF FARMERS, RANCHERS, AND THEIR COOPERATIVES.

ONE OF THE MOST IMPORTANT SET OF REGULATIONS WHICH FCA MUST WRITE WILL BE NEW CAPITAL ADEQUACY REGULATIONS. AGAIN, OUR STAFF HAS BEEN WORKING ON THESE PROPOSED REGULATIONS AND DRAFT COPIES ARE TO BE IN THE FCA BOARD MEMBERS' HANDS THIS WEEK. WE ARE ON SCHEDULE AS THESE REGULATIONS MUST ALSO BE ISSUED BY MAY 5TH.

THE CAPITAL ADEQUACY STANDARDS ARE TO BE SET ACCORDING TO GAAP AND ARE TO BE BASED ON SPECIFIC PERCENTAGES OF PERMANENT

CAPITAL OF THE INSTITUTION TO THE ASSETS OF THE INSTITUTION. WHEN DETERMINING THE RATIO OF PERMANENT CAPITAL TO ASSETS, WE MUST TAKE INTO ACCOUNT ALL THE RISK FACTORS THAT AFFECT THE ASSETS OF SYSTEM INSTITUTIONS. THERE IS A PHASE-IN PERIOD OF FIVE YEARS TO AFFORD SYSTEM INSTITUTIONS TIME TO MEET THESE NEW CAPITAL ADEQUACY STANDARDS. THE TERM "PERMANENT CAPITAL" DOES NOT INCLUDE ALLOWANCE FOR LOSSES OR STOCK THAT IS GUARANTEED.

MAXIMUM FLEXIBILITY IN HANDLING PERMANENT CAPITAL OR OTHER CAPITAL WAS INTENDED UNDER THE ACT ONCE PERMANENT CAPITAL ADEQUACY STANDARDS ARE EXCEEDED.

AS THE SUBCOMMITTEE IS WELL AWARE, THE FARM CREDIT SYSTEM IS NOT THE ONLY FINANCIAL ENTITY WHICH IS TRYING TO DEAL WITH CAPITAL PROBLEMS. IT HAS COMPANY, AND THE PROBLEM HAS BEEN ELEVATED TO INCLUDE ALL THE FREE WORLD'S DEBT AND ITS ATTENDANT FINANCIAL TROUBLES.

THERE IS AN ON-GOING INTERNATIONAL MOVEMENT TO REQUIRE UNIFORMITY IN MINIMUM CAPITAL ADEQUACY STANDARDS IN COMPETING WORLD FINANCIAL MARKETS. THE **BASLE COMMITTEE ON BANKING REGULATIONS AND SUPERVISORY PRACTICES** HAS FOR SEVERAL YEARS BEEN WORKING TO CAUSE INTERNATIONAL CONVERGENCE OF CAPITAL MEASUREMENT AND CAPITAL STANDARDS. CERTAINLY, THERE IS NOTHING SINISTER ABOUT THIS GROUP AND BECAUSE THE COOPERATIVE FARM CREDIT SYSTEM'S MINIMUM CAPITAL STANDARDS WILL IN ALL LIKELIHOOD BE EQUAL TO OR IN EXCESS OF THE INTERNATIONAL STANDARDS, THE BASLE COMMITTEE'S REPORT HAS VALUE AS REFERENCE TO WHICH OUR STAFF CAN LOOK FOR INITIAL GUIDANCE.

THE BASLE COMMITTEE ALSO LOOKS AT THE CONVERGENCE OF UNIFORMITY OF REGULATORY POLICIES AND PROCEDURES. IT WANTS UNIFORMITY IN EVALUATING THE ASSETS AS TO THE INHERENT RISK INVOLVED. SINCE THE FARM CREDIT SYSTEM IS DEALING PRIMARILY WITH ONE INDUSTRY, AGRICULTURE, AND IN SHORT-TERM FARM OPERATING LOANS, INTERMEDIATE-TERM AGRICULTURAL LOANS, AND LONG-TERM REAL ESTATE LOANS AS WELL AS SHORT-, INTERMEDIATE-, AND LONG-TERM LOANS TO COOPERATIVES, THE RISK FACTORS ARE MORE CRUCIAL TO THE SYSTEM THAN IF THE LOANS WERE MORE DIVERSIFIED AS IN THE COMMERCIAL BANKING INDUSTRY.

HISTORICALLY, PCAS AND BCS HAVE BEEN ALLOWED TO BUILD ALLOWANCES FOR LOAN LOSS RESERVES THAT QUALIFY FOR PERMANENT CAPITAL UNDER BASLE STANDARDS. TAX LAW CHANGES CAN AND DO AFFECT THESE RESERVES.

AS YOU CAN SEE, WE HAVE MANY DECISIONS TO MAKE IN PROMULGATING SAFE AND SOUND MINIMUM CAPITAL ADEQUACY STANDARDS FOR SYSTEM INSTITUTIONS.

BORROWERS' RIGHTS REGULATIONS AND MINIMUM CAPITAL ADEQUACY REGULATIONS HAVE RECEIVED THE HIGHEST OF PRIORITY IN THE AGENCY, AND DESERVEDLY SO. THE FCA BOARD HAS DISCUSSED THE IMPORTANCE OF ALLOWING ALL INTERESTED PARTIES TO PARTICIPATE IN THE REGULATORY PROCESS BY PUTTING OUT ADVANCE NOTICES OF PROPOSED RULE MAKING AND AGREEING TO HOLD PUBLIC HEARINGS AFTER OUR PROPOSED REGULATIONS ARE COMPLETE. HOPEFULLY, THE BORROWERS' RIGHTS HEARINGS CAN BE HELD IN A LOCATION THAT IS MOST ACCESSIBLE TO THE STOCKHOLDERS.

We have already acted on the Director Disclosure regulations as required by the 1987 Act and they are now under review and must be final by July 5, 1988. On top of all this, the FCA Board is considering regulations, also due July 5th, that deal with merger and consolidation of System entities; the Financial Assistance Corporation; Farmer Mac, the secondary market mechanism; and others dealing with lending, insurance, and numerous other issues required by the new legislation.

Members of the Subcommittee, I know you are aware that the present FCA Board is less than two years old and we have the 1971 Act as well as the 1985 and 1986 Acts, which were insufficient, and the Agricultural Credit Act of 1987, which we hope is sufficient, to carry out. Someone said, "the third time is charmed," and hopefully we now have a body of law which will keep us out of these Congressional halls during 1988. We need our staff totally involved in carrying out our current responsibilities. I know that this is a difficult climate in which to do good financial planning, but we at the Agency are especially concerned about our expenditures. We want to spend only the monies that are absolutely necessary to carry out our responsibilities. We have in the past returned funds that were not used. We all know that this money is ultimately coming out of a farmer's pocket somewhere and we all strive to return to him more in savings than cost.

Mr. Chairman, Chairman Naylor has indicated to you the large numbers of problems we have discovered in the making and collecting of loans in the System. We have found outstanding

WEAKNESSES IN BANKS' EXERCISING OF THEIR SUPERVISORY RESPONSIBILITIES. WE HAVE FOUND SERIOUS WEAKNESSES IN CREDIT ADMINISTRATION IN BOTH THE ASSOCIATIONS AND THE BANKS. WE HAVE SEEN SYSTEM BANKS WITH WEAKNESSES IN THEIR MANAGEMENT OF RISK AND WE HAVE SEEN A SYSTEM SLOW TO ADJUST TO THE CRISIS IN WHICH IT NOW FINDS ITSELF.

BUT WE HAVE FOUND SOME EXCELLENCE ALSO AND THIS IS COMMENDABLE AND HELPS REASSURE ME THAT THE SYSTEM CAN READJUST TO THE PRESENT LENDING CLIMATE IN WHICH IT NOW OPERATES. IT CAN PUT ITS RESOURCES TOWARD MAKING AND COLLECTING AGRICULTURE LOANS. IT CAN MANAGE ITS FUNDING IF IT WILL APPROPRIATELY USE THE 1987 ACT ALONG WITH ITS PREVIOUS AUTHORITIES IN ORDER TO CONTINUE AS AGRICULTURE'S PREMIER LENDER.

I THINK FCA IS ON THE ROAD TO BECOMING A TOP REGULATOR. THAT IS OUR GOAL, FOR I THINK WE ALL KNOW THAT WE CAN NEVER ALLOW THIS SYSTEM TO AGAIN GO UNREGULATED.

THANK YOU FOR ALLOWING ME TO BE HERE TODAY. I'D BE HAPPY TO RESPOND TO YOUR QUESTIONS.

STATEMENT OF MR. DUNCAN

Senator BURDICK. Mr. Duncan.

Mr. DUNCAN. Thank you, Mr. Chairman. I appreciate the opportunity to appear before this committee representing the Farm Credit Administration. I appreciate, as well, the committee's willingness to incorporate my remarks into the prepared transcript and thus, I will simply summarize my remarks briefly.

The agency fulfills its responsibility through a variety of regulatory actions that include examination of institutions and the enforcement of its regulations. Of course, regulatory actions are designed to promote adequate disclosure of the institution's financial condition and to protect the financial interests of the member stockholders who own the system institutions and the investors who buy the securities of the Farm Credit Banks.

When necessary, the agency exercises enforcement powers to promote the safety and soundness and to protect the public interest. As the chairman has indicated, to fulfill the responsibilities of examining every institution in the system, we have added substantially to our examination staff. Moreover, the agency has begun a program of specialized training for examiners that is composed of 3 years of advanced training courses, testing, and examination experience.

This program, our examiner commissioning program, is closely patterned after a very successful program at the Comptroller of the Currency. Our examiners who successfully complete the program will become commissioned examiners. Our examinations are aimed at assessing the financial condition of the institutions and their compliance with law and regulation and their overall soundness.

When we complete an examination, we assign a rating to that institution. That rating is based on a modified version of the Uniform Financial Institutions Rating System. Relevant factors in assigning a rating include the adequacy of the capital base; quality of loans; quality and quantity of earnings; sufficiency of liquidity, and the ability of the management to administer properly all aspects of the business.

As of yearend 1987, 21 system institutions were assigned a No. 1 rating; 114 were assigned a No. 2 rating; but of much more concern, 94 were assigned a rating of 4; and 103 were assigned a rating of 5, the lowest quality rating that our examiners provide.

With 197 institutions rated 4 and 5, Mr. Chairman, it indicates that very serious deficiencies in nearly all areas of operations and compliance were found among almost one-half of the institutions in the Farm Credit System.

I might make one comment with regard to the instances in which we have taken supervisory action. For example, enforcement documents covered Farm Credit System institutions at the end of 1987, covered institutions with some $32 billion in assets, which means that more than one-half of the reported total assets of $62 billion were in institutions in which enforcement documents were in place.

FINANCIAL CONDITION OF THE SYSTEM

One of my colleagues has mentioned that the system institutions were able to reduce their overall losses to about $17 million in 1987 from very high losses earlier. I must note, however, that that relatively low loss figure was primarily achieved on the basis of returning to the institution's income stream, part of the nearly $2 billion in loan loss reserves that were removed from the loan loss reserves during 1987.

Farm Credit institutions operating performance of 1987, as measured by interest income and all other operating income minus interest expenses and other operating expenses, but not including loan loss reserves, resulted in a loss of $185.5 million for the year.

Thus, it is important to recognize that some institutions, particularly the federal land banks, remain in serious trouble and continue to deteriorate. I have attached to my testimony a number of charts and tables to illustrate the financial condition of these institutions.

I must note that the institutions cannot expect to continue to cover operating losses out of reductions in loan loss reserves. Rather, credit pricing must reflect the institution's long-term cost of doing business. Stronger earnings from operations are going to be essential to these institutions to cover the deferred costs associated with regulatory accounting practices, to fund the new insurance corporation, to rebuild an institution's capital base and, ultimately, to repay federal financial assistance.

In short, Mr. Chairman, these facts, together with declining trends in capital surplus, are strong evidence that some institutions remain in serious financial condition. We must further recognize that management problems, sometimes ineffective policy direction, increasing competition from other lenders, including nontraditional lenders, such as farm cooperatives, a lower demand for agricultural credit generally, and the relatively high cost of Farm Credit Banks' outstanding debt all adds to the difficulty of restoring the overall financial health of these financial institutions.

PREPARED STATEMENT

I am going to conclude my verbal remarks at this point, simply noting that my testimony covers a number of aspects of the implementation of the Agricultural Credit Act of 1987, as well, but in the interest of time and recognizing that the members of this committee will wish to ask questions of the Farm Credit Administration Board members, I thank the committee for the opportunity to make these remarks this morning, and I welcome questions from the committee members.

[The statement follows:]

STATEMENT OF MARVIN R. DUNCAN

Mr. Chairman, I appreciate the opportunity to appear before this committee representing the Farm Credit Administration. As a financial regulator, the Farm Credit Administration is responsible for promulgating regulations to implement the Farm Credit Act and other applicable laws and for promoting the safety and soundness of Farm Credit institutions. The agency fulfills this responsibility through such regulatory actions as the examination of system institutions and the enforcement of regulations.

Regulatory actions are designed to promote adequate disclosure of the institutions' financial condition and to protect the financial interest of the member stockholders who own the Farm Credit institutions and the investors who buy the securities of the Farm Credit Banks. When necessary, the agency exercises enforcement powers to promote safety and soundness and to protect the public interest.

I would like to review how we are carrying out these responsibilities and what we are finding as we go about that work and then comment on the implications of those findings on the financial condition of the Farm Credit System. Finally, I would like to offer some observations on the Agricultural Credit Act of 1987 and the opportunities and challenges it creates for system institutions.

In compliance with the Farm Credit Act Amendments of 1985, we initiated examinations of all Farm Credit institutions. To facilitate that, new examiners were recruited from among 33 colleges and universities bringing our total examination staff to 355. Because of our extensive recruitment and training programs, we have been able to maintain in our direct examination program the lowest cost per examiner of any Federal regulator of financial institutions.

The agency has begun a program of specialized training for examiners that is composed of three years of advanced training courses, testing, and examination experience. This program, our examiner commissioning program, is closely patterned after a similar and quite successful program at the Comptroller of the Currency. Our examiners who successfully complete this program will become commissioned examiners.

This program has two immediate benefits. First, the program enables the agency to operate with an examination force that has the level of expertise and professionalism necessary to carry out our congressional mandate to examine and regulate system institutions. Secondly, it serves to enhance the professional reputation of the examination staff, and the Farm Credit Administration in the industry and beyond.

The examinations are aimed at assessing the financial condition of the institutions, their compliance with law and regulations, and their overall soundness. When an examination is completed, we assign a rating to the institution. That rating is based on a modified version of the Uniform Financial Institutions Rating System, which we call the FCA Rating System. Institutions are rated on a scale of one to five in descending order. Relevant factors in assigning a rating include the adequacy of the capital base, quality of loans, quality and quantity of earnings, sufficiency of liquidity, and the ability of management to properly administer all aspects of the business.

As of December 31, 1987, 21 system institutions were assigned a rating of "1," 114 were assigned a rating of "2," 82 were assigned a rating of "3," 94 were assigned a rating of "4," and 103 were assigned a rating of "5." With 197 institutions rated "4" and "5," Mr. Chairman, it indicates that very serious deficiencies in nearly all areas of operations and compliance were found among almost half of all Farm Credit System institutions.

While we have 355 examiners to uncover these problems, we have only 10 professionals in our Supervision Division to carry out enforcement actions when conditions are serious enough to warrant such actions. As of December 1987, 32 enforcement documents had been executed with system banks and associations. Thirteen of those documents were formal agreements and 19 were cease and desist orders. Enforcement documents covered Farm Credit institutions with $32 billion in assets, more than half of the system's reported total of $62 billion.

As members of this committee may know, the Farm Credit System institutions reported losses for 1987 of $17 million. This is on the heels of $1.9 billion in 1986 and $2.7 billion in 1985. But that relatively low loss figure was only attained by returning to the institutions' earnings stream, part of a nearly $2 billion decline in Farm Credit institutions' loan loss reserves during 1987.

However, Farm Credit institutions' operating performance for 1987, measured by interest income and all other operating income minus interest expenses and any other operating expenses, not including loan loss reserves, resulted in a $185.5 million loss. Thus, it is important to recognize that some institutions, principally in the Federal Land Banks remain in serious trouble and continue to deteriorate. I have attached to the text of my testimony a number of charts and tables to illustrate financial conditions in Farm Credit institutions and in the U.S. agricultural sector.

On an aggregate basis, the Farm Credit institutions' loan volume continues to decline, from a reported $58.2 billion at the end of 1986 to $52.5 billion at the end of 1987. Net interest income, too, is declining, from $1.3 billion in 1985, to $781 million in 1986, and now $509 million reported at the end of 1987. The Farm Credit institutions reported $5.2 billion in non-accrual loans and $4.3 billion in high risk loans, comprising 19 percent of their total portfolio. And from some of what we are seeing in our examinations, the amount of those adversely classified loans may well be understated.

With the reduction in the provision for loan losses during 1987, Farm Credit institutions have $2.9 billion left in their allowances for loan losses account to cover losses that might be incurred from the $9.5 billion of adversely classified loans in their portfolios. In addition, the Farm Credit institutions reported carrying 2.3 million acres of acquired farmland valued at $865 million.

In short, institutions cannot expect to continue to cover operating losses out of reductions in loan loss reserves. Rather, credit pricing must reflect the institution's longer-term cost of doing business. Stronger earnings from operations are needed to cover the deferred costs associated with regulatory accounting practices (RAP) authorized by the 1986 amendments, to fund the new insurance corporation, to rebuild an institution's capital base and, ultimately, to repay the federal financial assistance.

When an institution is found to be improperly classifying loans, our examinations have discovered that its allowance for loan losses and the amount of loan charge-offs required to accurately reflect the true value of its loan portfolio are usually understated as well. We find that these problems occur most frequently when the institution has an inadequate internal loan review program.

The initial deterioration in the portfolio most commonly stems from poor credit administration and ineffective management by Farm Credit banks of their debtor/creditor relationship with Production Credit Associations and their agent relationship with Federal Land Bank associations, and for the same reasons in the Farm Credit associations. In some institutions, we have noted that where adequate policies and procedures do exist, they simply are not being followed.

What I am saying, Mr. Chairman, is that these facts, together with the continuing declines in capital and surplus, are strong evidence that some Farm Credit institutions remain in serious financial condition. We must further recognize that management problems; sometimes ineffective policy direction; increasing competition from other lenders, including non-traditional lenders such as farm cooperatives along with farm supply and marketing firms; a lower demand for agricultural credit generally; and the relative high cost of Farm Credit banks' outstanding debt all add to the difficulty of restoring the overall financial health of the Farm Credit institutions.

In the Agricultural Credit Act of 1987, the Congress provided a prescription intended to help the Farm Credit institutions on the road to recovery. It is up to these institutions to fill it with care and administer it according to directions.

I would like to touch on just four elements of that prescription and the opportunities afforded by each if the Farm Credit institutions can successfully meet the challenges and take advantage of the opportunities.

First, is the financial assistance itself. The Farm Credit System Assistance Board has the authority to ensure that aid is prudently granted and effectively used. The Farm Credit Administration stands ready to assist in that process in any way permitted by the legislation -- whether providing information, implementing enforcement actions, or appointing conservators or receivers. A primary concern of the Farm Credit Administration will be to assure the availability of Farm Credit services to every credit worthy farmer, rancher, and farmer cooperative.

The challenges lie in the administration of financial assistance and making sure the institutions receiving it follow the terms and conditions laid down by the assistance board. It simply cannot be business as usual for those institutions whose financial condition has deteriorated to the point where assistance is needed.

Second, are the provisions for restructuring the Farm Credit institutions. Restructuring provides an opportunity for the institutions to streamline their organizations and to operate more efficiently. As restructuring is considered, it may be well to keep in mind that the basic structure of the various parts of the Farm Credit System have remained unchanged since their inception. That was 1916 for the Federal Land Banks (FLBs) and Federal Land Bank Associations (FLBAs), 1923 for the Federal Intermediate Credit Banks (FICBs), and 1933 for the Production Credit Associations (PCAs) and Banks for Cooperatives (BCs).

What does that structure look like and how efficiently is it working?

Well, there are 13 Banks for Cooperatives making loans to agricultural cooperatives. On September 30, 1987, they had an average of 337 outstanding loans per bank with an average amount of $182,000. On the farm lending side, there are 12 FLBs, 12 FICBs, and 377 associations. Those associations have about 1,700 branches. If we take an average, each office had 325 loans on the books with an average amount of $65,000. In addition, the system has an umbrella policy coordinating organization, the Farm Credit Corporation of America.

The Farm Credit institutions with their somewhat ponderous decision making process and unwieldy organizational structure now find themselves at a disadvantage in competing against leaner and more nimble lenders for a share of the declining farm credit market.

It seems to me that the Congress made a wise decision in providing system institutions a wide range of options to use in meeting the competitive challenges and providing outstanding credit services.

Restructuring holds forth some promise of a reduction of operating expenses over the longer-term. At the same time, it gives Farm Credit institutions' stockholders an opportunity to have a strong voice in determining the destiny of their institutions.

I should note, however, that we thus far see little evidence of lower costs as a result of the reorganizations that have occurred. Costs can be cut through restructuring but to do so requires significant changes in the way credit services are delivered to borrowers.

The challenge is for the committees and boards of directors involved to make restructuring proposals that meet both the need to cut costs and the necessity of providing outstanding credit service. I hope in making their proposals, those involved will also take steps to eliminate the overlapping, repetitive, and often confusing process now involved in setting standards, establishing policies, and making decisions. That process now can involve a multitude of committees, the associations, banks, districts, a national Farm Credit institution, or combination thereof. I hope directors and stockholders of system institutions use the tools provided by Congress to build effective and efficient institutions that become, in each case, centers of excellence in the agricultural credit business.

Third, many of the borrower rights and restructuring provisions of the statute. Most of the borrower rights provisions, in my view, mandate what should have always been fair and equitable business practices for borrower-owned credit cooperatives.

The loan restructuring provisions, however, though probably attractive from the perspective of a borrower or prospective borrower, could result in some problems.

When Federal assistance ends, the hard reality is that the borrowers who are current on their loans will have to bear the costs of restructuring that may or may not result in viable farming operations in the long-term. While there is not yet an estimate of the cost of borrower rights and loan restructuring language to Farm Credit institution borrowers, a 1987 North Dakota State University study has estimated the cost of that state's preferential legislation for farm debtors to be 143 basis points in higher interest rates along with decreased credit availability for non-delinquent borrowers.

Current borrowers who perceive that good farmers are being penalized by being held to the status quo, while those whose performance might be considered less than acceptable are being rewarded by having their loans restructured, might question whether to remain Farm Credit borrowers. Indeed, I hear such questions being raised with increasing frequency by farmers who have continued to make timely payments on their Farm Credit loans.

The legislation also relaxes somewhat the normal credit discipline of borrowers and provides a wide range of hooks on which to hang challenges to adverse credit actions by the lender. Indeed, some of its provisions are similar to those governing actions by the Farmers Home Administration (FmHA).

Borrower rights and loan restructuring regulations to implement the statutory requirements can be expected to add to the Farm Credit Administration's operating costs. More examiner time must now be devoted to checking for compliance with statute and regulations on this subject during our examinations as well as additional monitoring for compliance.

Despite these potential hazards, the long-term viability of the Farm Credit institutions will depend, in large part, on the degree to which the institutions can successfully meet the challenge of restructuring distressed loans. It is difficult to overstate the importance of the institutions aggressively and effectively working through their portfolios of distressed loans and returning those to accruing status where possible. And as a rule, the earlier the distressed loan is identified and receives special servicing, the less costly it is to the lender and the more beneficial for the borrower.

I also note the likelihood that borrower rights and loan restructuring requirements could result in a new conservatism in lending practices as institutions attempt to limit the adverse effect of those provisions on operating costs. I hope, however, those provisions will result in better lending practices -- more attention to cash flow and repayment capacity -- and better credit administration after the loan is made. I hope future loans won't have be restructured; that good loans will rebuild the base for sound and financially successful financial institutions.

Fourth and last, is the secondary market for farm real estate loans. It may result in a number of benefits for farm borrowers. These include:

-- an increased number of lenders from which farmers can choose;

-- a wider range of loan products and credit services being offered to farmers;

-- a more stable supply of credit to rural borrowers;

-- the possible return of readily available long-term fixed rate loans; and

-- increased competition among institutions that should bring better service and perhaps slightly reduced rates.

The Congress found a prudent and equitable way to solve the potential problem of Farm Credit loans carrying a premium in the secondary market because of the borrower rights provisions. That was done by giving the borrower a choice of not having his or her loan pooled, or having it pooled and giving up some of the borrower rights.

This brings up an interesting proposition. It suggests that the extent to which system institutions sell loans in the secondary market may be more dependent on what their borrowers want than on what management wants. And, the borrowers' choice may well depend on the differences in loan terms between loans that are pooled and loans that are not. This may result in Federal Land Banks evaluating the costs of borrower rights and then offering the borrowers the option of paying for them or not. It could then come down to how much the borrower rights are worth to the person taking out the loan.

System institutions, of course, can participate in the secondary market as loan originators, loan poolers, or both. The secondary market itself provides the opportunity. The increased competition that it may bring provides the challenge.

I expect that the Agricultural Credit Act of 1987 can make it possible for the Farm Credit institutions to not only work their way back to financial stability, but to meet the competitive challenges that lie ahead. Meeting those challenges will require greater attention to the credit needs of their customers, improved management of their business, and increased cost effectiveness in credit delivery.

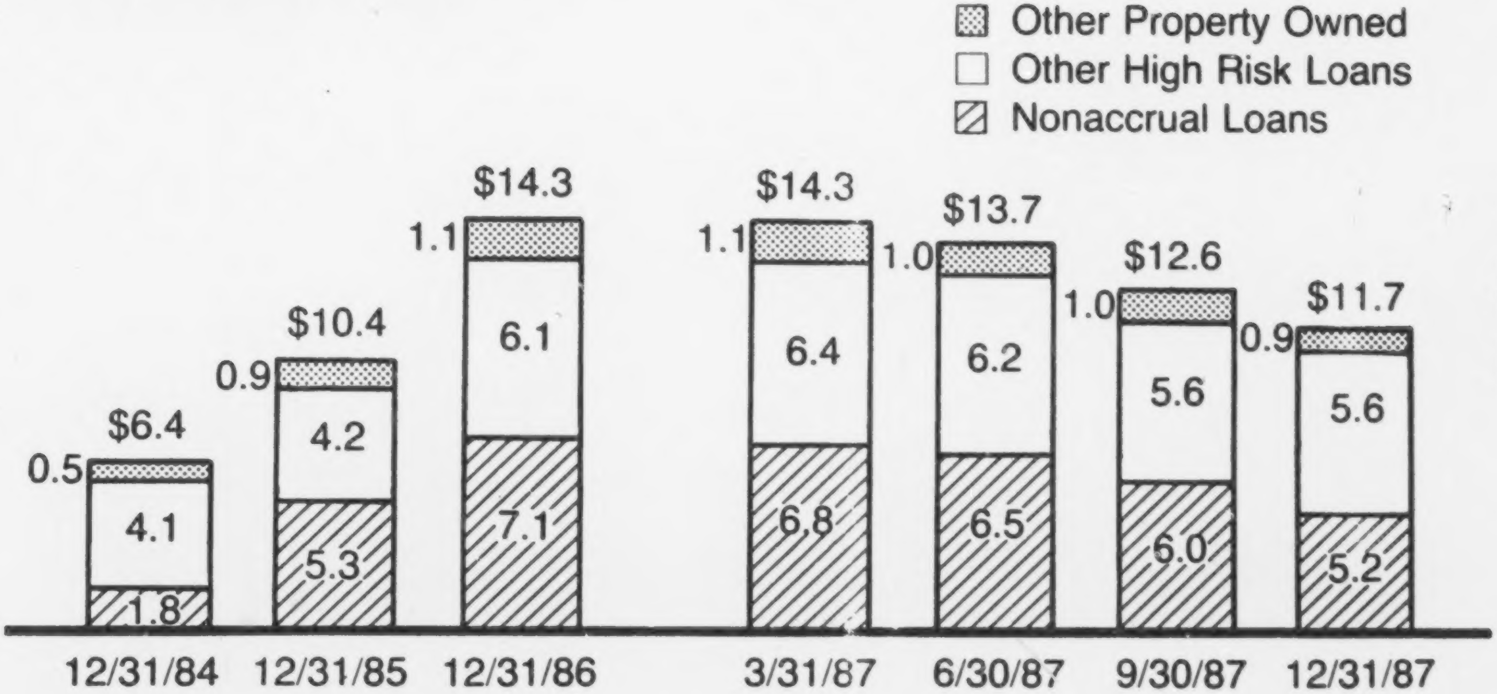
In short, if Farm Credit institutions are to prosper in the future each bank and association must become a center of excellence. Nothing less will do.

Mr. Chairman, I'd be pleased to respond to any questions.

Exhibit 1

FCS High Risk Assets

(US Dollars in Billions)



Source: Farm Credit System

Exhibit 2

FARM CREDIT SYSTEM OPERATING INCOME

(US Dollars in Millions)

	1979	1982	1985	1987
FLB/FLBA	349.0	695.4	172.3	(307.7)
FICB/PCA	267.9	424.6	240.4	44.4
BC	109.5	160.0	106.8	77.8
FCS Total	726.4	1,280.9	519.5	(185.5)

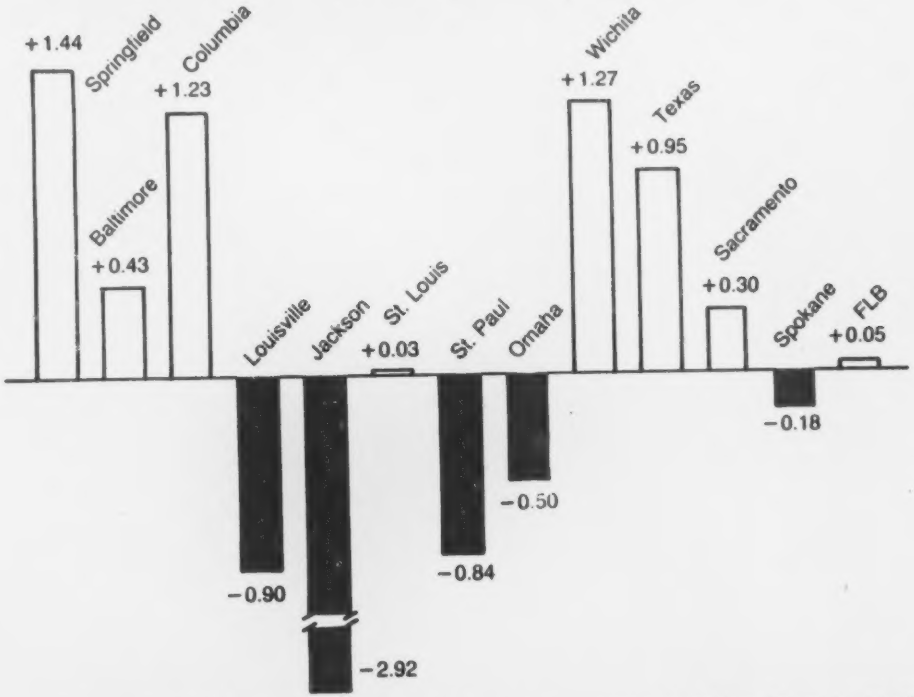
Note: Net operating income is interest income and all other operating income minus interest expenses and any additional operating expenses. Net operating income does not include the provision for loan losses.

Source: Farm Credit Administration

Exhibit 3

Net Interest Margin as Percent of Average Balance of Earning Assets in Farm Credit System Federal Land Banks for 1987

(PERCENT)



Note: Average Balance of Earning Assets is computed by taking the average of accruing loans outstanding and investments at the end of each quarter of 1987 and year-end 1986.

Source: Farm Credit Administration

Exhibit 4

FARM CREDIT SYSTEM GROSS LOANS OUTSTANDING

12-31-70	U.S. Dollars	15,300,000,000
8-31-83		81,600,000,000
12-31-87		52,800,000,000

Note: The FCS gross loan portfolio contracted by nearly $29 billion falling to $52.8 billion, between 8/83 and 12/87. This reversed all of the growth between May 1979 and Aug. 1983. May 1979 FCS Loan Volume = Dec 1987 FCS Loan Volume = $52.8 billion.

Source: Farm Credit Administration

Exhibit 5

UNITED STATES FARM DEBT
(US Dollars in Millions)

	FCS*	Other Private Sector Lenders	FmHA	Total Excl. CCC	Addendum: CCC
Dec. 31, 1950	1,504	10,149	586	12,239	812
Dec. 31, 1960	4,107	19,539	1,143	24,789	1,390
Dec. 31, 1970	12,661	36,712	3,235	52,608	1,730
Dec. 31, 1980	56,736	100,956	19,560	177,252	3,525
Dec. 31, 1983	69,093	112,326	24,158	205,577	9,911
June 30, 1987	44,691	88,525	26,785	160,000	14,300

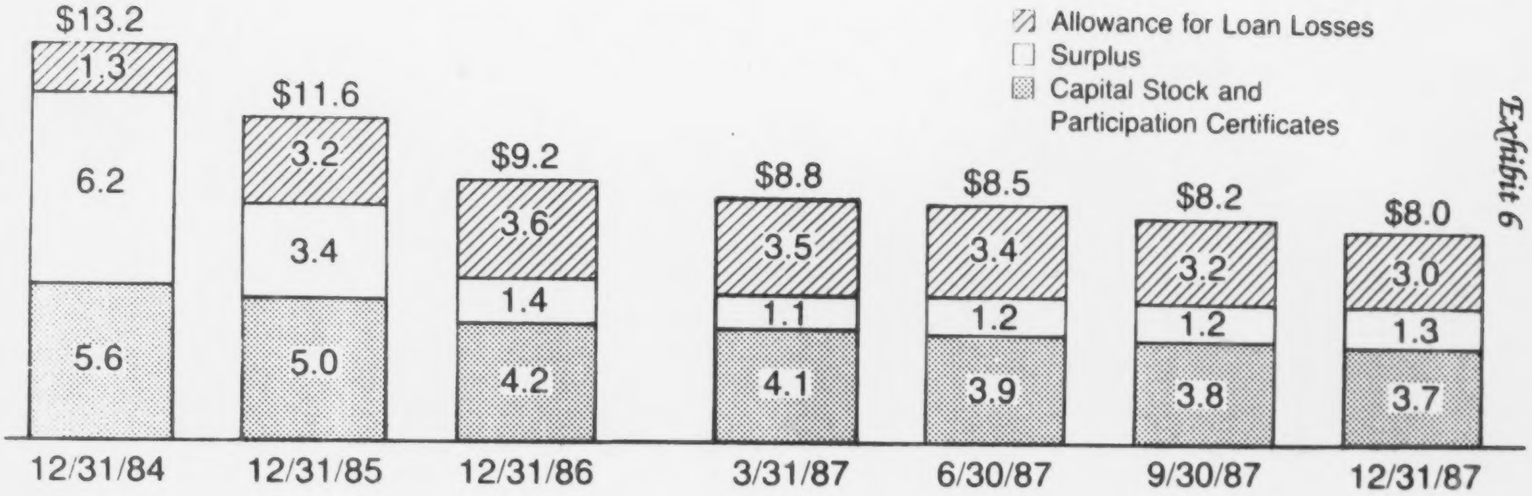
Note: Farm debt peaked in 1983 at $206.5 billion when the FCS share peaked at $69 billion.

Source: Farm Credit Administration and USDA *Economic Indicators of the Farm Sector.*

*FCS Loans exclude BC loans and all other non-farm loans.

Exhibit 6

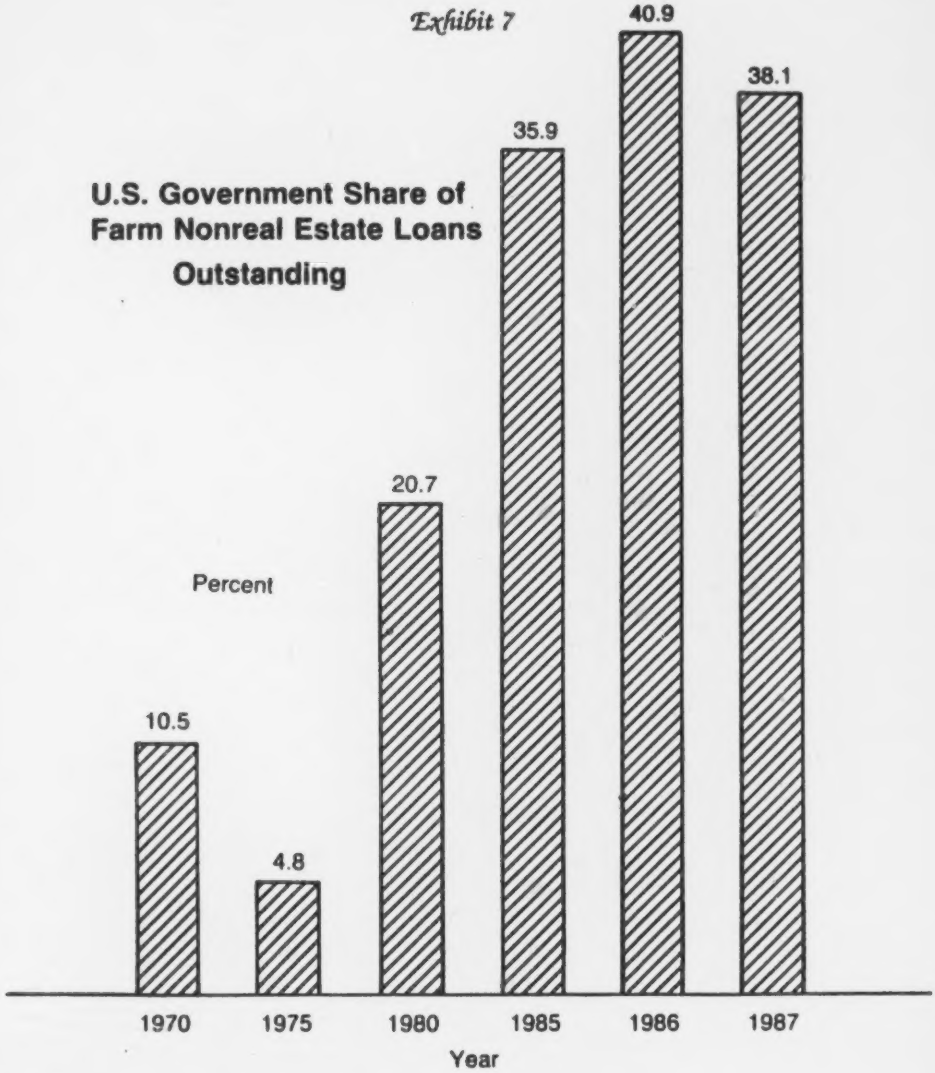
FCS Total Risk Funds
(US Dollars in Billions)



NOTE: Capital stock and participation certificates outstanding at the passage of the Agricultural Credit Act of 1987 are guaranteed by the Federal government.

SOURCE: Farm Credit Administration

Exhibit 7



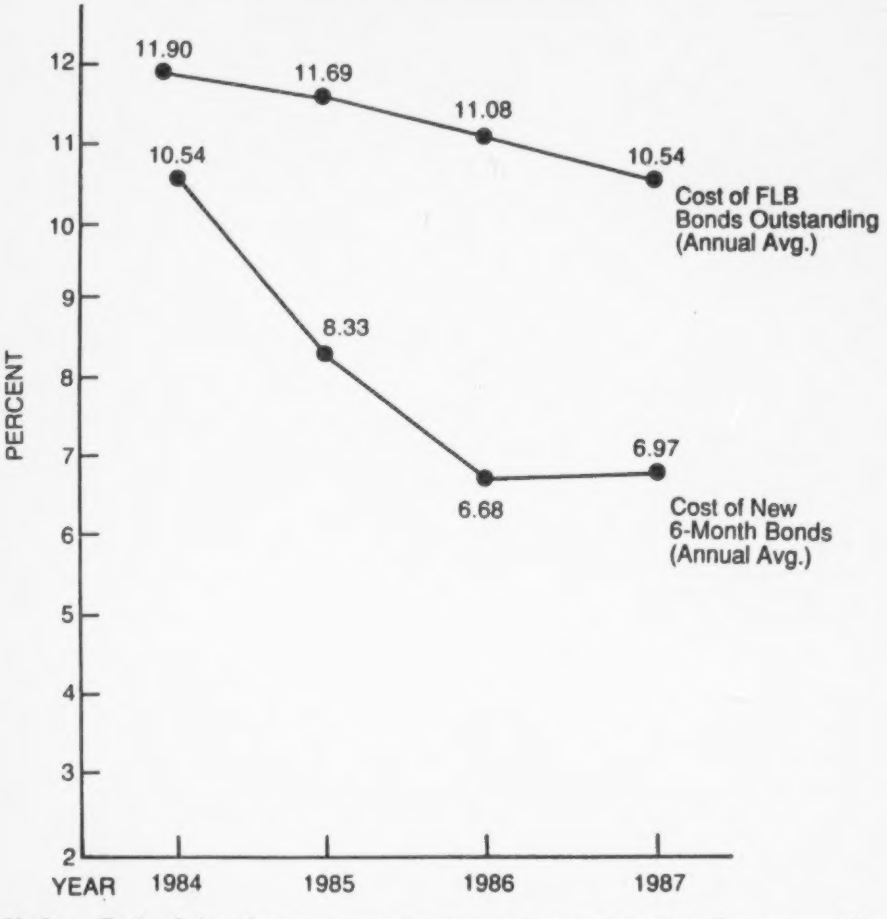
U.S. Government Share of Farm Nonreal Estate Loans Outstanding

Note: Government lenders include FmHA, CCC and SBA.

Source: Farm Credit Administration and USDA *Economic Indicators of the Farm Sector*

Exhibit 8

Effect of High-Cost Bonds on Farm Credit System Federal Land Bank Portfolio



Note: Both of the above measures represent averages over the course of each year.

Source: Farm Credit Administration

STATEMENT OF SENATOR SASSER

Senator Burdick. Senator Grassley?

Senator Grassley. Thank you, Mr. Chairman, and I am done with my responsibilities upstairs, so I am glad to be able to rejoin you.

Senator Sasser. Mr. Chairman, I wonder if the Senator would yield for 1 second to allow me to put a statement in the record?

Senator Grassley. Yes. Yes, absolutely.

Senator Sasser. With our Defense appropriation we have got the Defense Subcommittee of the Appropriations Committee. I have got to get over there to keep the Army from disbanding some of the National Guard units in North Dakota.

Senator Burdick. How much time do you want?

Senator Sasser. I just want unanimous consent to insert my statement in the record as if read, Mr. Chairman. I thank you, and I thank Senator Grassley.

Senator Burdick. It will be received without objection.

[The statement follows:]

Statement of Senator Jim Sasser

Thank you, Mr. Chairman. I would also like to extend my welcome this morning to our panel from the Farm Credit Administration.

Gentlemen, last year, as the Agricultural Credit Act was discussed, the most common comment which I heard from farmers was that they just did not think that the bill would really address their problems. I tried to reassure them that a section regarding borrower's rights and efforts to restructure would ensure that farmers would have every opportunity to improve their worsening debt situation. We have yet to see exactly how effective the act will be in keeping farmers on their farms and giving them reasonable repayment rates, but I do know that I still have farmers contacting my office to complain that a federal land bank or a production credit association is making it difficult for them just to go into production this spring.

While I am very supportive of your efforts to rebuild and restructure the Farm Credit System, I also want to ensure that we are addressing the needs of our farmers. It appears that we have made the turn toward recovery in our agricultural community, but there are still thousands of farmers who are in danger of losing land or their entire farms because of indebtedness. This should be a time for them to look forward to a new prosperity, not the prospects of foreclosure.

I trust that you gentlemen will be greatly involved in implementing the Agricultural Credit Act and will uphold the wishes of Congress. We want to know that the small scale and family farmers can still play a role in the agricultural economy. I believe that the Farm Credit System will play a large role in allowing that tradition to continue. With the financial assistance provided to the system and the restructuring of institutions, you have a good opportunity to make the system run prosperously, while still serving the greatest needs of our farmers.

Thank you, Mr. Chairman. I also have some questions which I would like to submit for the record.

BORROWER RIGHTS

Senator Grassley. Mr. Chairman, thank you very much for my opportunity to question, and I wanted to thank Mr. Naylor, Mr. Duncan, and Mr. Billington for their testimony. I think every one of us on this committee has been keeping a close watch on the Farm Credit System and its regulators, the people who are now before us. I am pleased that the FCA is pursuing the implementation of the Agriculture Credit Act with diligence and swiftness.

I would also like to encourage you to continue your endeavors in the most expeditious manner so that the Farm Credit System borrowers will not be frustrated with ambiguity. That is always possible when you are starting out with a new act, and I would like to start my questioning in regard to some waivers that have come to my attention in the Omaha District.

It was a few weeks ago, Mr. Chairman, that these were brought to my attention. I brought them to the attention of the Congress, and then eventually, expressed my feelings about them to the people in Omaha, because it was the Omaha District which was requiring borrowers to sign waivers as a condition for restructuring.

By signing the waiver, borrowers would have forfeited their borrowers' rights relating to advanced notification of foreclosure actions, debt restructure and review, and protection of borrowers' holding rights. I was told by Omaha District officials, at that time, that these waivers were required of those borrowers who renegotiated agreements with the system before passage of the Agricultural Credit Act of 1987.

This affected about 1,000 borrowers in Iowa, and, of course, I am relieved that the Omaha District suspended utilization of these waivers, but I am, however, concerned about borrowers in other districts.

So whoever is appropriate to respond, could you tell me whether a similar waiver or other restrictions on borrower's rights are being utilized in other districts of the Farm Credit System?

Mr. NAYLOR. Senator Grassley, I commend you for your efforts on this particular issue. To our knowledge, there is no other institution in the system that has taken any similar action to the ones about which you raised a concern.

There is, justly so, a concern with regard to the act as to whether or not what I have termed loans in process, in other words, loans in which action had been commenced on a loan prior to the passage of the bill, is indeed subject to the borrowers' rights in the legislation.

It strikes me as abundantly clear that the intent of Congress was that it does, but it is apparently subject to legal interpretation from a technical point of whether or not that is the case. As a result, in a meeting that I and my colleagues had with the system leadership in January, we strongly encouraged them to take the policy position that that should be, indeed, the case that the borrower's rights would apply to those loans in process.

The system nationally adopted a policy position of that type at that meeting. However, as you are aware, there have been a few individual institutions, specifically, the one to which you refer, which have taken a different approach. I think there is a significant amount of pressure from the users as well as the other system leadership to take, I think, a more informed view on recognizing the intent of Congress.

FCA REGULATIONS ON BORROWER RIGHTS

Senator GRASSLEY. I thank you for your response and for your attitude, and I think it conforms to what I think is the clear intent of Congress. I hope that whatever lawyers look at it will look very clearly at what I think is the clear intention of Congress. So maybe you have answered my next question with just the good intentions you expressed. But let me ask: Would the FCA draft regulations to prohibit the utilization of waivers or other forms which in any way compromise the intent of Congress in relationship to borrower's rights?

Mr. NAYLOR. Senator Grassley, Congress was very clear in their intention, and our regulations will conform very directly and concur that that intent is carried out.

Senator GRASSLEY. OK. Does the Farm Credit System Administration plan to promulgate regulations to protect borrowers from similar infringements upon their congressionally mandated rights? I think maybe you have also answered that adequately, but you would say even beyond any use of the waiver.

Mr. NAYLOR. That is correct. I think you will see the regulations coming from the agency clearly go to the heart of what Congress intended. This will set the basis for us to carry out appropriate examinations.

Senator GRASSLEY. I don't want to beat a horse to death, and maybe I ought to be satisfied with the very cooperative answer that I have gotten. Let me go one step further and hit it from just a little different angle. Would the FCA agree to aggressively investigate instances where it becomes known that the Farm Credit System officials will act to undermine the borrower's rights provisions in the Agricultural Credit Act?

Mr. NAYLOR. Senator, that has already been our practice, and indeed, we have had examination personnel even follow up on-site the incidents that you have noted. We would pursue any incidents where we see a violation of law or regulation occurring in the form of examination activity and enforcement activities.

POTENTIAL ADMINISTRATIVE COSTS

Senator GRASSLEY. OK. In your case, directing this to some of your testimony, Mr. Naylor, you indicated that you expected the borrower's rights provisions, especially restructuring of debt, to require Farm Credit Administration costs. It is my understanding, however, in regard to the act that restructuring is mandated only when it would be the best business decision of the system. Section 102 of the act very clearly spelled out that lenders must restructure only when it would be less costly than foreclosure. If implemented according to these specifications, why would restructuring increase the cost to the system?

Mr. NAYLOR. Senator, the problem you always have in this type of situation is that there are additional administrative costs that are developed when you legislate a group of rights that should have been carried out as a matter of normal business practice in the sense that there are various appeal rights. There is substantial documentation that has to be maintained on these.

I have already discussed this with system leadership, as have my colleagues. It strikes me as being very important that the system promptly, fairly, and equitably implement very straightforward handling of these rights to minimize those additional administrative burdens that would otherwise occur.

However, if they don't do that, in any one of several institutions around the system and you find yourself involved in extensive litigation and extensive additional documentation where public policy becomes an issue, there will, indeed, be an additional cost that will represent operating overhead that will have to be absorbed by system users.

Senator GRASSLEY. OK. Let me refer to a couple of points where I think, unless we are talking about two different things, I would like to say that the act, in consideration of restructuring applications, will include the commitment of all available income-to-debt obligations; management ability of the borrower; and probability of success. These are all considerations under restructuring.

I can point it out to you, but let me read it: "Reasonable and necessary administrative expenses involved in restructuring with the borrower to finalize and implement the restructuring plan."

It seemed to me like whatever costs you are talking about are within the intent of Congress as a part of the total package as you are setting out to find what the bottom line is to either restructure or to foreclose, these things that you are talking about would be included in it and then consequently, not a cost in the final analysis.

Mr. NAYLOR. They are included in the sense that it is a calculation which would be the most advantageous option to the owners as to whether or not you write debt off or you do a restructuring. I think, Senator, however, we may be talking about apples and oranges. Clearly, it is intended that the restructured loan would be the least costly approach to the individual institution involved.

However, because you do have what I would call public policy provisions now involved in these borrower rights and based on our experience with Farmers Home Administration, the level of documentation, the types of records that have to be maintained, the work that gets involved with the appeal process and the review process, the amount of additional litigation, some of which has already begun, is going to, in the end, result in additional costs due from system users on the whole.

My hope in my discussions with system leaders has been to implement properly and fairly these provisions and to maintain those costs as low as possible.

Senator GRASSLEY. OK. I would only suggest that I believe they ought to be a part of any bottomline decision that is made between restructuring or foreclosing. I won't go into greater length except I would ask that we not have a heavy emphasis upon this at your level of regulation that would detract from the justification of borrower's rights or between those rights and those costs. Because, again, we saw them as part of the bottom line; what was good for the total system as well as what was good for the individual farmer. We figure in both instances, if the bottom line is observed and the costs are going to go into it, both are going to be better off in the final analysis. Do you see?

Mr. NAYLOR. Senator, I think on the basis of what you are talking about, that is correct. I think we understand that very clearly. In fact, our emphasis has been to try and encourage the banks to minimize some of the other costs that I was referring to so that it doesn't detract.

DECLINING LOAN VOLUME

Senator GRASSLEY. OK. Again, I appreciate that attitude.

Now if I could ask Mr. Duncan, from your testimony about the Farm Credit institutions' loan volume continuing to decline, how much of this is attributed to an erosion in the reputation of the system? And how much is it attributable to stress and farm finances on just the plain old lack of demand for credit, which even commercial bankers are telling us about today?

Mr. DUNCAN. Senator, I think that a substantial part of the decline in the system outstanding has to be attributed to the decline in farm sector debt. U.S. farmers and ranchers have undertaken an astonishingly rapid repayment. Repayment of their debt outstanding at the end of 1988 is projected by the USDA to perhaps be as low as $130 billion for the farm sector, net of CCC debt, and that means that all lenders are facing a softer demand for agricultural credit.

Indeed, across the nation, agricultural lenders, be they Farm Credit institutions or other institutions, commercial banks, for example, are eagerly seeking out creditworthy borrowers because they face a softer demand, generally, for credit.

Part of the reduction in system outstandings has been a result of a writing off of losses in the system's portfolio. Part of it going forward will be a result of the restructuring of loans where those compromise the principal and so forth.

Certainly, you are correct, Senator, in your implication that part of it is a result of a loss of confidence of borrowers in the Farm Credit institutions but, perhaps more importantly, a recognition by borrowers that they were able to do better by going to the commercial bank or the S&L or the insurance firm. They were able to get comparable credit products at lower costs.

FCA REGULATORY MISSION

Senator GRASSLEY. Prior to my next question, I just simply remind you of some statements I had made maybe over the last 2 or 3 years that were interpreted to be more critical of the system, even when I was trying to give encouragement to the system. You know that the Farm Credit System, prior to 3 or 4 years ago, was the most respected agribusiness institution in rural America, and probably literally, turned out to be the least respected. What is implicit is the hope that we return the institution to the most respected position.

Along that line, if you consider a part of that responsibility, and I hope you do, what is the Farm Credit Administration planning to do to bolster the overall reputation of the Farm Credit System as a viable lender for agriculture?

Mr. DUNCAN. Is that question directed to me?

Senator GRASSLEY. Yes.

Mr. DUNCAN. Yes, Senator; I think that the most fundamental and most constructive activity this agency can engage in to rebuild or help the institutions rebuild their credibility is to carry out the FCA's responsibility as a financial regulator in an exemplary fashion. Where there are problems in an institution, we identify those in our examinations; we bring that to the attention of directors and management, and we do that in an evenhanded, fair, and professional fashion.

Indeed, I have been pleased with the performance of our examiners because as I travel around this system visiting the system people, I hear managers and directors say, "We weren't all that happy with some of the things you pointed out to us, but your people did it in a professional fashion, and we have to recognize that they were probably right."

Identifying problems so that management and policymakers in the system can get those problems corrected will do more to rebuild the credibility of the system institutions than almost anything else we can think of.

When the system institutions are regarded as being well run, serving well the interests of creditworthy borrowers and stockholders, then farmers will, once again, have pride in their Farm Credit institutions.

SYSTEM LOAN LOSS RESERVES

Senator GRASSLEY. About a year ago, the FCA came to Congress asking for financial assistance. The message was that the financial status of the system was rapidly deteriorating, thereby impairing borrowers' rights and investors' confidence. However, losses had been reduced from 1 year $2.7 billion to then $1.9 billion and then last year, just $17 million.

I guess again, I would direct this to you, Mr. Duncan. You testified that this reduction is attributed mainly to transfers out of the loan loss reserves. Yet you also testified that there are insufficient reserves to cover classified loans.

Could the system afford to make this transfer? Why was such a transfer of funds authorized, and was this transfer made in the belief that the farm financial crisis was over?

Mr. DUNCAN. Well, let me answer the questions in reverse order.

Clearly, part of the justification for removals from loan loss reserves is, in part, based on a stabilization in farm real estate values, and it certainly is true that some of the institutions had reserved more heavily against risk in their portfolio than would be necessary if real estate values have, indeed, stabilized.

So in some instances, it was justifiable for institutions to make removals from loan loss reserves where that was, in their judgment appropriate, and in some instances where we have examined them, we would concur, where the loan loss reserves were excessive.

However, there are other institutions where we go in and we find that loan loss reserves are not adequate, and there, we require additions to loan loss reserves.

The important point to remember about the reductions in loan loss reserves is that the institutions cannot continue to use reductions in loan loss reserves, shunting part of that into their operating income stream to make up for operating losses in those institutions.

Rather quickly, the institutions will have to begin to cover operating costs out of operating income.

Senator GRASSLEY. So the answer, then, is basically, in regard to my first part, that at least momentarily, they could afford to make that transfer but probably can't continue much longer.

Mr. DUNCAN. That is correct. In many instances, that will be a once-and-for-all activity, and certainly, I would not expect that they could shunt anything like the magnitude of loan loss reserve reversals into their stream in 1988 that they did in 1987.

FINANCIAL ASSISTANCE

Senator GRASSLEY. Do you anticipate that the system will use all of its authorized bonding authority that the 1987 act allows?

Mr. DUNCAN. The $4 billion plus that used to be called the Governor's Revolving Fund?

Senator GRASSLEY. Yes.

Mr. DUNCAN. I would think that it would not be necessary for system institutions to use all of that, but that is premised on the expectation that land values will, indeed, stabilize and perhaps begin a modest appreciation, and that will be a continuing trend; and second, that the institutions themselves move aggressively and effectively to cut back on operating overhead to simplify the credit delivery system they have, because there is currently in their credit delivery system, a lot of duplication and repetition that is adding to their operating cost.

The ability of the system to come in, to rebuild its financial stability and not have to tap all of that authorized borrowing capacity will depend mightily on two factors: The stabilization of land values and continuation of a modest upward trend of those land values, and second, the ability and willingness of system institutions effectively to get a handle on streamlining their credit delivery system.

AVAILABILITY OF CREDIT

Senator GRASSLEY. Thank you.

Now, leading up to my last question, and thank you for your indulgence, Mr. Chairman, again, Mr. Duncan, your statement talked about loan credit reserve loss. I think the credit you reflect is the long-term cost of doing business. You also imply that the borrower's rights provisions will have an adverse effect on the availability of credit.

If I may, again, quote from your submitted testimony, you say that these provisions may result in "a new conservatism in loaning practices as institutions attempt to limit the adverse effect of these provisions on operating costs."

Mr. Duncan, I understand that the system must practice responsible and viable lending practices in order to serve the credit needs of all borrowers, but I wonder if these comments of yours should be interpreted to mean that the Farm Credit System will impose standards on systems banks, forcing them to raise interest rates and/or deny credit to borrowers.

I mean, in your leadership position, saying these things.

Mr. Duncan. No. No, Mr. Senator. That is not the intent. It is the intent to point out that where inappropriate credit underwriting standards and ineffective credit administration were in place, that will have to change and those institutions will have to adopt effective and appropriate underwriting and credit administration standards if they are to expect to be able to work back to financial stability.

I think it was the expectation of the Congress in passing this assistance legislation, that the institutions will use the opportunity to correct those problems in business management and policy and to set the institutions on sound financial footing. I believe that best serves the interests of the borrower-stockholders and will assure that creditworthy borrowers will always have access to competitively priced credit from sound credit institutions.

What has happened in the institutions in the past is that unsound credit administration, unwise underwriting standards, inappropriate funding policies have, on one side of the business cycle, induced farmers to borrow too much at interest rates that were unsustainably low, only on the other side of the cycle, to have those borrowers face unduly high interest rates and restrictive standards.

It is far wiser, in my judgment, to let the Farm Credit System institutions adopt prudent operating policies and standards so that they can be credible and consistent lenders to farmers throughout the business cycle.

DEBT RESTRUCTURING

Senator Grassley. That is my last question. By just emphasis, in relation to that portion, you make a statement about borrower's rights, remember that Congress approached this as a bottomline decision, a clear-cut decision of whether or not it was better for the system and the farmer and they are both, of equal status here, to foreclose or to restructure, the bottom line.

From the standpoint of the farmer continuing to do business, if he has got a cash flow and has a chance of continuing to operate, remember that the system is better off if you have those foreclosures in the 25 to 30 to 35 percent administrative costs range and a write-down that naturally comes if you have a fire sale approach to doing business.

Mr. Duncan. I concur with you, and indeed, in my testimony, I have devoted some attention to that in pointing out that it is difficult to overemphasize the importance to the system institutions of effectively restructuring loans, working through their troubled assets and returning loans to accruing assets wherever that makes sound business sense and is a sound business decision.

Senator GRASSLEY. I would ask the entire Board, maybe, to go back over your testimony and maybe make some clarifications, because I guess I am a little fearful that the overall tone of testimony from Board members might be conveying some sort of a warning to us in Congress that the effect of borrower's rights provisions will have a negative impact on credit pricing or availability to all system borrowers, and I am concerned, very concerned, even if you don't intend to.

Go back and look. Make clear that you don't intend to say this, because I think it is a wrong emphasis for you to choose, and I get a negative attitude from you here that you want to convey that message to us. I think maybe you have. Take a look at it from that standpoint.

Thank you, Mr. Chairman.

Senator HARKIN [presiding]. We have a vote at 11 o'clock. Go ahead, Mr. Chairman.

FINANCIAL CONDITION OF THE SYSTEM

Senator BURDICK. Mr. Naylor, last year when you testified before this subcommittee, you indicated that the financial condition of the system was quite serious, but you also indicated that at the fourth quarter of 1986, the intermediate credit banks did begin to show some improvement.

How do you view the financial picture as we see it today ?

Mr. NAYLOR. Mr. Chairman, the overall picture, particularly in the land bank system, continues to have some serious problems. While they were able to show almost a break-even situation this year in terms of reporting an annual loss of $17 million, as my colleagues and I pointed out, the system, particularly the land bank portion of the system, is not covering its operating cost with its operating income.

Indeed, as Mr. Billington pointed out, that situation even continues to deteriorate in some districts. It is going to require very careful work on the part of system management and directors to overcome that and turn it around if the system is to return to viability in any reasonable time soon.

The growing number of the institutions, however, all in the system, I think, are beginning to show improvement. Indeed, several districts are showing reasonably good operating results, even at this point in time.

There are some of these institutions, however, within the system that are in very, very grave difficulty, some of which have been reported in the media, which are under the supervision, already, of the Assistance Board, and I understand, Mr. Chairman, you will have the Assistance Board before you at a later hearing.

The Assistance Board will be in a position to review those particular cases or some of the areas of that concern with you more thoroughly at that time.

In summary, it is a mixed bag. The overall trend seems to be more hopeful. I have, certainly, some optimism that the system in most areas is beginning to move in the right direction. The overall operating results in many of the institutions are improving, but there are still too many institutions, as Mr. Duncan pointed out, over half, that are under some form of enforcement activity in terms of total volume that have very serious changes that they are going to have to make if they are going to return to sound operation.

AGRICULTURAL CREDIT ACT OF 1987

Senator BURDICK. Do you anticipate, say, over the next 12 months that the system will again ask for assistance from Congress?

Mr. NAYLOR. Mr. Chairman, I don't think Congress is going to let us through the door if we were to do that again. You have dutifully worked arduously for the last 3 years to provide legislative activity to assist the system, and I think particularly in this last year, the Congress provided what I believe are arguably all the tools that anyone could ever reasonably expect to return these institutions to viability.

It would be a sad day if it was necessary to come back to Congress again after the work you have done in the last couple of years.

Senator BURDICK. Do you care to comment on that, Mr. Billington or Mr. Duncan?

Mr. DUNCAN. I would concur with Chairman Naylor's comments.

Mr. BILLINGTON. I concur with his comments. The net operating losses, taking out the provision for losses and allowance for loss accounts, are showing continued deterioration, as I stated before, in the system.

As the chairman stated, this has to be addressed. The Assistance Board, maybe, would be able to address that issue working with these troubled banks because a lot of these losses are in troubled banks. The other system entities, the ones that are close to financial assistance, probably will choose to stay out, if they can, because stiff penalties are in the act on the side of management and direction over the banks if assistance is provided.

I would assume that the Congress certainly, through this act, provided the motivation to turn this situation around and improve it. Hopefully, we are going to observe that decision first, and next year, we will certainly know what the sum of that is when we come back next year. But I don't foresee any kind of financial assistance needed beyond the $4 billion any time soon.

PROBLEMS OF WEAK BANKS

Senator BURDICK. What is your opinion about the survivability of many of the system banks that are weak financially today? Does that create a special problem?

Mr. NAYLOR. Mr. Chairman, clearly, the 1987 act provided an express specific process for the analysis of the Assistance Board to evaluate and determine what kind of assistance, if any, will have to go into the most troubled institutions.

There are, indeed, a number of institutions within the system in very grave financial condition who have had serious questions raised about their continuing viability.

The Assistance Board is already moving to work on those and will be able to have the full range of options provided by Congress in dealing with them in either returning them to viability, merging them with another district that is stronger, or, in the most extreme case, liquidating an institution and having a neighboring Farm Credit System institution provide service to that area.

Mr. BILLINGTON. Mr. Chairman, if I might, I need to leave now. I appreciate very much the opportunity to come before this committee and discuss these things. If there is anything you would like to know before I leave, I would need to leave at this time, if possible.

DEBT RESTRUCTURING

Senator BURDICK. Before you leave, then, I want to ask you a legal question. There is always one in every crowd when you are dealing with lawyers, you know. Let's assume now we have got farmer A. He has used the process and the programs that are before him now, and he has been able to reduce his debt, let's say, $100,000. The papers are so written down.

He is back on the farm. He has got $100,000 less debt. Are you still with me?

Mr. BILLINGTON. Yes.

Senator BURDICK. Now he prospers, and he does well. Is that debt going to stay with him, that $100,000? I told you it was a legal question.

Mr. DUNCAN. Mr. Chairman, that is in the nature of restructuring. I think quite clearly, there will be restructuring, and probably a lot of it, under the terms of the legislation. Where principal is forgiven, there is a write-down in the amount of the loan that is outstanding. However, one has to be careful about making blanket statements in that regard, because it will depend in individual cases on the business arrangement between that borrower and his institution.

THE 1987 ACT AND DEBT RESTRUCTURING

Senator BURDICK. This is a theoretical thing, that they owe the debt and the write down is forgiven, but is it really forgiven in the law? That is my question.

Mr. NAYLOR. Do you mean in the 1987 act? I don't think, although I don't have my general counsel here, Senator, I don't think that is clear in the 1987 act, and I think in the alternative, although I will verify with our attorneys and ask for a specific interpretation to your question, I think the full range of options are open to the institutions, which would include, if a borrower had a loan restructured and principal set aside and agreed that at a future time that his financial circumstances made it possible, that that debt could then be called back in and be subject to additional repayment.

My own recollection is that there is no specific prohibition of what is a fairly standard commercial banking practice. However, I will ask for the record to have our counsel look at that and give you a very specific answer.

Mr. BILLINGTON. Senator, I would also add that in cases where these write-downs do occur, according to the act, if they can write it down for less than the cost of a foreclosure and the borrower can repay the debt, then, in most states, they will probably write that portion of it off.

Senator BURDICK. On the theory that the government hasn't lost any money?

Mr. BILLINGTON. Well, on the theory and the law clearly states on the theory it would be cheaper to go ahead and write it down, write it off and get the books right again and fix it so the borrower could repay the debt. That probably would not be chased after later in many states.

In fact, there are some title companies which have written some opinions that are questioning some of the ability to go ahead and share in the future earnings of that farm and things like that. The state title laws are affected. I am not an attorney, so I don't know.

Senator BURDICK. The other question I will ask is very remote, I think, but in most cases, I have been asked the question, "What happens to the debt?" What is your opinion on that?

Mr. NAYLOR. I will be glad to have our counsel look into that, but as I indicated, I don't think there is a specific prohibition. It will depend upon a contractual agreement entered into between the borrower and the institution.

Senator BURDICK. This same question arose a number of years ago. Let's hope it is favorable to the farmers.

[The information follows:]

AGENCY REPLY ON DEBT RESTRUCTURING

Section 4.14A(a)(7) of the Farm Credit Act of 1971, as amended by the 1987 act, defines restructuring to include rescheduling, reamortization, renewal, deferral of principal or interest, monetary concessions, and the taking of any other action to modify the terms of, or forbear on, a loan in any way that will make it probable that the operations of the borrower will become financially viable. The write-down of a loan, resulting in a portion of the principal being forgiven, is one of the options, but the treatment of the debt would depend on the specific contractual agreement entered into between the borrower and the institution.

Mr. BILLINGTON. May I be excused, Mr. Chairman? I need to go.

Senator BURDICK. Yes; you may be excused.

Mr. BILLINGTON. Thank you, sir.

Senator BURDICK. Senator Harkin.

COST OF BORROWER RIGHTS

Senator HARKIN. Thank you very much, Mr. Chairman. I think we have a vote coming up at 11:20. I will try to be as rapid as I can. Mr. Naylor and Mr. Duncan, I just want to cover some things dealing with the loan restructuring provisions. Mr. Duncan, you say on page 7 of your testimony that, "the likelihood of the borrower's rights and loan restructuring requirements could result in a new conservatism in lending practices." I just want you to remember that.

Then Mr. Naylor, you say on page 7 that the, "New borrower's rights provisions which can have an important positive benefit for producers still facing troubled loans will have a significant cost to the system. Institutions must apply the new borrower's rights in the most cost effective way possible," et cetera.

The Omaha and St. Paul District banks have taken the lead in interpreting these Farm Credit bill provisions, I believe. They have taken the high road. They have implemented the borrower's provisions showing good faith and the intent of Congress in these areas.

Other districts are business as usual and have not really considered their actions in foreclose, that is, to write the credit reviews, but legal action has already been started and we will get into that retroactive provision in a moment. I also hear that other districts continue to sell forms and inventory actions to the highest bidder. Omaha and St. Paul have offered the right of first refusal to the previous owners to finance farms in inventories.

I have a couple of questions. One, are you aware of the discrepancies in implementing the borrower's rights provisions of the Agricultural Credit Act of 1987, for example, for St. Paul and Omaha Districts as compared to other districts?

Mr. NAYLOR. I was interested in that, because there have been some concerns raised in the Omaha District about a letter that apparently went out to borrowers asking that they give up their borrower's rights as a term or condition of restructuring. Those letters have been withdrawn.

To our knowledge to date, the districts have been in compliance with the law. We specifically look, for example, at an action that occurred in one district.

Senator HARKIN. What occurred?

Mr. NAYLOR. An action that occurred in one of the other districts which it appears that they have and did, indeed, comply with the provisions of the 1987 act.

RIGHT OF FIRST REFUSAL

Senator HARKIN. Did they give them the right of first refusal?

Mr. NAYLOR. The requirement on an auction situation under the law is that the former owner be notified in writing that he has a right of first refusal if he goes to the auction and matches the best bid obtained at the auction, basically, is what the law says. Such a notification, to the best of our knowledge, was, indeed, sent in those occasions where that has occurred.

The clarity with regard to that segment of the law is perfectly good, I think, Senator. On the auction issue, it is not as clear in the section with regard to direct private party situations with regard to how first right of refusal is to be handled.

We discussed this a little earlier. One of the most difficult questions for us, I think, has been that there is a question of legal interpretation in the law with the situation of what I have termed loans in process at the time that the bill was signed into law. It was my view, and my colleagues', as we have testified earlier, when we met with the leadership of the system, that it was quite clear that the intent of Congress was that the rights will apply to loans in process; indeed, the system has adopted a policy to that effect.

But it has not been implemented across the board at individual institutions at this point in time.

Senator HARKIN. How soon will it be implemented?

Mr. NAYLOR. It is arguably within their rights, Senator, in individual institutions, if their counsel so advises them that would not have to implement that policy and take the narrower view that Congress did not provide specifically for that interpretation. I am not aware of any institution that has taken that hard of a line in a public way or by any actions of which we are aware.

However, they are not required to adopt that national policy which their leadership passed in January. That only applies, Senator, to that one very specialized category of loans or to those that, as I have termed them, are in process. It certainly does not apply to the loans in process now.

Senator HARKIN. I'm sorry. What was the last statement?

Mr. NAYLOR. That very clearly applied to that one very special set of circumstances along with those in process, having actions taken on them prior to the law taking effect. Any actions started after the bill was signed into law clearly are fully covered by the borrower's rights provisions.

CONGRESSIONAL INTENT

Senator HARKIN. I will have to recheck the record on that. I thought there was some discussion of that when the bill came through. I thought we made it clear about that.

Mr. NAYLOR. Senator, my personal view is it was abundantly clear what Congress intended. Unfortunately, as we know, in a very complex bill like that, some things slip through the cracks. This apparently is one of those situations where the intent is quite clear but the law, as it is actually in law, does not give that clarity and gives the option of that interpretation.

Senator HARKIN. Well, I don't know what we can do about that. Perhaps we can do something about it; I don't know. Again, what I am leading to is that the Omaha and St. Paul Districts have told me is that their litigation costs are down because they have applied this right.

Mr. NAYLOR. I would agree with that thoroughly, Senator, in the sense that to the degree, and myself and my colleagues in meeting with the leadership are strongly pressuring them to very quickly and very fairly implement these borrower's rights provisions, because it would be very unfortunate to become engaged in a lengthy round of litigation over the interpretation of these rights. That can only cost everyone, including the borrowers.

Senator HARKIN. That is my point, that when you talk about being a cost institution, the institutions must apply the new borrower's rights in the most cost-efficient ways possible. Again, what I have seen in the past indicates that this would be the most cost efficient way to do it.

If they start getting bogged down in litigation and all kinds of things, it is going to cost the system more money than if we implement the provisions that we just talked about.

That is why the losses are sustained. I would think that any way you can reduce those to keep from going through litigation, costs, that was the whole idea of this whole restructuring and everything, because it looked like it was more cost effective. In that case, we had every indication that it was.

Again, I am just wondering what can be done to get out in these districts and indicate that to them and to give them what the clear intent of Congress was in this area.

Mr. NAYLOR. Senator, I think this agency and the system leadership have made a diligent effort to accomplish that end. It would be tragic if a failure of individual institutions resulted in a very complex procedure.

One of the real problems, I think, was discussed by the committees during the process of the legislation is that when you put into law what is good, sound business practice, and I think that is very clearly what you were intending to do, you have the risk that because of the possibility of litigation, because of the fact that this is becoming public policy, the documentation and the amount of recordkeeping in the appeals process, if it is not handled prudently and wisely, it can become a very costly undertaking.

That was what we were expressing in our statement.

FCA ENFORCEMENT ACTIONS

Senator HARKIN. Yes; well, that is exactly the way I feel, too. I have got to go vote. On page 10 you talked about the cease and desist orders. The measuring of the 13 PGA's to afford SICB's and land grants.

What kind of circumstances would precipitate a cease and desist order? You have got the letter from Senator Cranston and Senator Wilson about an order calling short-term loans to some farmers. I am just wondering, what kind of circumstances bring about cease and desist orders?

Mr. NAYLOR. It can be a wide range of circumstances, Senator, but fundamentally, in the most similar policy description, any practice by any institution which results in an unsafe, unsound financial condition or operation within that institution. The cease and desist order is issued only in those cases where the most severe violations of either regulation or law or financial practice occurs and that failing to correct those would lead to the potential failure of that institution.

The standards that we apply, Senator, are very parallel; in fact, I think the regulatory agencies within the government, the Comptroller of Currency, FDIC, ourselves, are following very comparable standards in activity in this area.

Senator HARKIN. Did you receive Senator Cranston's letter?

Mr. NAYLOR. No, Senator; I did not.

Senator HARKIN. I will give you a copy. I have really got to go now. I will hold on to followup questions.

Mr. NAYLOR. We will be delighted. I think it may be similar to the letter which came from some House Members, and we are preparing, our professional staff is, a response to that. I think what is involved here is a mixing of apples and oranges, and that I think we could actually clear that up for you.

Senator HARKIN. I will just submit those questions in writing. I am going to recess the hearing. Senator Burdick is coming back, and he has some other things. I assume he will be back in about 5 minutes. Thank you.

[A brief recess was taken.]

IMPLEMENTING BORROWER RIGHTS

Senator BURDICK. Mr. Naylor, what are your feelings about extending borrower's rights to members who are in financial trouble since these costs will ultimately be borne by borrowers with performing loans?

Mr. NAYLOR. Mr. Chairman, our view, and what we have working in the system, is promptly and fairly to implement the provisions of the borrower's rights in a way that, hopefully, will minimize the cost to the overall system user, the farmer, in the Farm Credit System.

Clearly, there are some risks, and circumstances as we were discussing with Senator Harkin, that could develop as a result of legislation, in which litigation occurs, and in which the documentation procedures and appeal processes will represent a cost that would have to be passed on to all of the users.

It has been my view that if the system in good faith promptly and fairly implements those provisions, then those costs could be minimized, and this should not be a major factor in their ability to be competitive.

ASSISTANCE CORPORATION

Senator BURDICK. The President's budget requests $175 million for payments to the Farm Credit System Assistance Corporation. These payments are for interest expenses on U.S. guaranteed debt issued by the corporation. This projection was apparently based on the issuance of 2 billion dollars' worth of bonds in 1988 to 1989.

Based on your analysis of the picture today, what level of bonds do you believe will need to be issued in order to ensure the viability of the Farm Credit System?

Mr. NAYLOR. Mr. Chairman, as the regulator, we are not, and properly, I don't think should be, involved in the decision process of the Assistance Board or of the administration with regard to requesting funds on the bonds to which you refer. We have not done analysis work for them or any of the work involved on that projection.

I would have to defer to them to respond to your inquiries in this area.

Senator BURDICK. Do you have your own opinion?

Mr. NAYLOR. I can in no way make an evaluation, except that it appears that the total volume of hard dollars which may be necessary in the near term may be rather minimal; that through the issuance of notes in lieu of hard cash, that the early payment or early requirements would be relatively modest, but I have no data as to what their evaluation is or how they are approaching it.

REVOLVING FUND

Senator BURDICK. Recognizing that you have at your disposal the assets of the Farm Credit Revolving Fund, couldn't this fund be used to provide assistance for troubled institutions?

Mr. NAYLOR. There is a question; the fund now has been turned over to the Assistance Board, Mr. Chairman. Counsel, both in the administration and the Assistance Board, is not certain whether it is clear, that as the law actually was signed, they can use those funds for assistance at this time.

That is still under review by their counsels, and they have not made a final determination whether they feel it can do that or not. It was clear that I could and my Board could during the time of the transition between the signing of the law and the Assistance Board taking effect.

We had that authority but it is unclear in the law in the minds of the counsels whether or not the Assistance Board has the same authority.

Senator BURDICK. Do you expect an opinion soon?

Mr. NAYLOR. They tell me that they hope to have it resolved, because it would be their decision, not ours, shortly in determining whether or not they would be able to use any of those funds for that purpose.

FCA BUDGET

Senator BURDICK. Your budget justification indicates an increase of $461,000 for automatic data processing equipment. However, you indicate that the first and last major acquisition of automatic equipment was in 1984. You clearly state this equipment is not mature and requires replacement.

I find it hard to believe that equipment only 4 years old needs to be replaced. What is the situation?

Mr. NAYLOR. Well, unfortunately, with the rapidity with which the industry has improved, equipment and the types of equipment that are available are dated equipment. More importantly, Mr. Chairman, with the expanding examination responsibilities we have and the amount of analysis work that that entails with an expanded force of examiners, our present equipment simply is not up to the task. Not to upgrade it would extend substantially the number of hours necessary to do each exam and, in the end, would be substantially more costly than this would be.

Senator BURDICK. The new equipment would be more efficient than the old equipment; is that right?

Mr. NAYLOR. Much more so. As I am sure you are aware, Mr. Chairman, the advances in that industry have been phenomenal in the last 5 years, both in terms of capacity, and the costs have gone down significantly for fairly advanced equipment.

OTHER SERVICES

Senator BURDICK. You indicate an increase of $833,000 for other services. Would you describe more specifically what the other services are?

Mr. NAYLOR. They cover a wide range of activity, and what we have done is taken some of the services out of individual departments and put them under our general administrative area.

Basically, they involve the overall general administrative service area; they provide the money for the payroll; the cost of the Treasury bill for doing the payroll; the cost of maintaining the buildings; the cost of doing repair work, maintenance work, that type of thing.

It has all been placed under that general category of services, and it has been consolidated into one account, Mr. Chairman, and I believe our submission breaks that out in some detail as to what the specific assignment to those funds would be.

Senator BURDICK. You are asking for money for new computer equipment. At the same time, you are asking for more money for outside computer work. How do they hang together?

Mr. NAYLOR. That, in part, is a recognition that our current equipment is not fully capable of meeting all of our requirements until we have the upgrading, and we do, as most federal agencies do, have some outside assistance on intermittent types of work and work that can be contracted out on a per-cost basis.

Senator BURDICK. How much money do you contemplate spending for consultants during fiscal year 1989 and for what purposes?

Mr. NAYLOR. I don't believe we have any specific funds for consultants. We do have some contract work in the examination and supervisory area, but at this point in time, we have not, I don't believe, in the budget, included any provision for any consulting work of the type you refer.

Senator BURDICK. In other words, that figure might cover contracting out?

Mr. NAYLOR. It includes funds for contracting out at the examination and supervisory level and certain types of work or getting professional skills that we do not otherwise have in some of our areas, on occasion, to help us evaluate particular technical issues from a financial perspective. But I am "reading" something here that maybe may not be here, Mr. Chairman. If you are referring to the general broad-based consultant concept that a lot of federal agencies use, we do not have any type of that thing in the budget.

REGULATORY EXPENSE REFUNDS

Senator BURDICK. In fiscal year 1987, you had a budget of $39,420,000. Did you end up with an unobligated balance at the end of the year?

Mr. NAYLOR. Yes, we did, Mr. Chairman. Our problem has been that we have not yet, in fact, don't in the current year, finally have a full year of operations under the new law with which we were fully staffed up and had our particular examination staff fully in place.

The law has changed markedly over that period of time, and what our responsibilities have been, and it has been extremely difficult for us to accurately project how quickly we would be in place and fully operational. We believe the 1989 budget fairly reflects our ability to meet all of the responsibilities built into the current legislation with the possible exception of issues with regard to consumer complaints, which, at this point in time, we really have no way to evaluate what, if any, costs may develop in that area for us.

Senator BURDICK. How much was it at the end of the year?

Mr. NAYLOR. Let me get my book back out. Which year, Mr. Chairman?

Senator BURDICK. 1987.

Mr. NAYLOR. $7.4 million was the amount turned back, Mr. Chairman.

Senator BURDICK. Was any of this returned to the system members?

Mr. NAYLOR. It all goes back to the system members.

Senator BURDICK. Do you expect to have any unobligated balance at the end of fiscal year 1988?

Mr. NAYLOR. At this point in time, because of the reduction in the allocation of funds during our reconciliation process, it looks like it is not likely that it will be fairly close to being exactly what we have anticipated.

SUBMITTED QUESTIONS

Senator BURDICK. Thank you very much. Questions will be submitted to you for the record from the following Senators: Senators Harkin, Bumpers, McClure, Cochran, Sasser, and myself. We request your replies be provided as soon as possible.

Mr. NAYLOR. Thank you, Mr. Chairman. We appreciate the chance to appear before you and do our work today.

[The following questions were not asked at the hearing but were submitted for response for the record:]

QUESTIONS SUBMITTED BY SENATOR BURDICK

LOAN RESTRUCTURING

Question. What is the status of restructuring regulations under the new act?

Answer. The loan restructuring regulations will be part of the proposed borrowers rights regulations that will be considered by the FCA Board at its April meeting.

Question. Does FCA have to promulgate regulations? When do you expect to do it?

Answer. Several provisions of the Agricultural Credit Act of 1987 addressing borrowers rights require the FCA to issue regulations and to revise existing ones. In addition, the Farm Credit Act of 1971, as amended, provides that the FCA Board shall issue regulations as the Board considers necessary for the orderly and efficient implementation of the Act and amendments to it. In passing the Agricultural Credit Act of 1987, Congress included in the statute the provision that the FCA issue regulations as expeditiously as possible, generally not later than 180 days after enactment, which was January 6, 1988. We have every intention of issuing these regulations in a timely manner. Several proposed regulations will be considered by the FCA Board at its April meeting, including the FCA's examination and investigation process, FCA policy governing civil money penalties, regulatory accounting practices, conservators and receiverships, borrower rights, and minimum permanent capital standards for System institutions. As required by the statute, these proposed regulations will first be sent to the House and Senate Agriculture Committees for 30 days, then will be printed in the Federal Register for public comment.

Question. Are system members going ahead with restructures and foreclosures without the benefit of the new regulations? Is this allowed?

Answer. The debt restructuring provisions of the 1987 Act are statutory obligations which System institutions are subject to. Specifically, the statute requires each District bank to adopt policies governing the restructuring of distressed loans within 60 days after enactment of the 1987 Act. These policies are to be followed by the banks and associations in each respective district. The FCA examination staff continues to examine System institutions for their compliance with all applicable laws and regulations in effect at the time of the examination.

Question. Will the new regulations include requirements for notification of any action affecting a borrower's account as required by law?

Answer. The proposed regulations would incorporate the express statutory requirements which require that a System institution notify a borrower when his or her loan is placed in nonaccrual status if an adverse action against the borrower would result from such change in status. In addition, the proposed regulations would incorporate the express statutory provisions which require notification that a distressed loan may be suitable for restructuring.

Question. Can system members do what they want in this area until the regulations are implemented?

Answer. The actions of System institutions are governed by the provisions of the Farm Credit Act of 1971, as amended. Those provisions are effective in accordance with the terms of the statute upon the date of enactment except with respect to a few provisions which were previously subject to FCA regulations. The restructuring and right of first refusal provisions were not previously subject to FCA regulations and therefore, in the opinion of the Farm Credit Administration, institutions were required to comply with those provisions according to their terms, upon enactment.

GENERAL

Question. Do you feel that the amount of funds ($4 billion) authorized for use in assisting troubled system entities will be sufficient to see the system through this crisis?

Answer. The $4 billion authorized by Congress to be administered by the Farm Credit System Assistance Board should be adequate to meet the needs of System institutions if it is properly used by those institutions. This does not suggest, however, that individual System institutions may not fail. Whether or not a particular institution can return to viability depends upon its overall condition and upon the ability of Boards of Directors and management to use the assistance resulting from the 1987 Act in an attempt to restore sound operations.

Question. Just how bad is the system doing financially?

Answer. The System's financial condition is discussed in greater detail in the agency's prepared testimony, but to summarize, the System reported a $17 million loss in 1987, compared to a net loss for the previous year of $1.916 billion. The System reported that loan volume continued to decline from $58.2 billion at yearend 1986 to $52.5 billion at yearend 1987. Nonaccrual loans decreased from just over $7 billion for 1986 to $5.234 billion for 1987. The System also reported a decline in other high risk loans and in acquired properties, but it also reported a substantial decline in earnings on such property held.

Question. Can it really pull itself out of this crisis? If so, how so?

Answer. Our agency is optimistic, Senator. With the proper commitment to good business practices, including more streamlined and efficient operations, the System can overcome the current problems it is facing. The System institutions have direct control over two major factors in this recovery. These are overhead costs and borrower/stockholder relations. High cost debt has a negative impact on interest rates to borrowers. Efficient operations to reduce the cost of overhead can help to keep rates as low as possible while providing a return to augment capital considering the unfortunate commitment the System made in the past to long term, high cost debt. Effective borrower relations cannot be discounted as another major accomplishment that System institutions must cultivate. Good borrower/stockholder relations are critical in any cooperative organization that is to survive and thrive.

Question. How do you respond to allegations that FCA is overburdening banks and associations with costly and time-consuming paperwork?

Answer. When the Farm Credit Administration became an arm's-length Federal regulator in accordance with the Farm Credit Amendments Act of 1985, it began to regulate System institutions much the same way that other financial institutions are regulated. Because the System institutions had not been regulated as other financial institutions are, reporting and regulatory requirements required a period of necessary adjustment.

The FCA is working with the System institutions to make our requirements less burdensome through technical and other means. We have already reviewed the various reporting requirements for System institutions and have eliminated unnecessary and duplicative reporting requirements wherever possible.

PAYMENTS TO THE FARM CREDIT SYSTEM FINANCIAL ASSISTANCE CORPORATION

Question. Are you currently providing the operating expenses for the Farm Credit System Assistance Board?

Answer. The FCA is providing no funds out of its operating budget for the Assistance Board. The Assistance Board has temporary use of the FCA Revolving Fund for its operating expenses.

Question. How much money have you made available and how much do you expect to make available in the future?

Answer. The 1987 Act established the Assistance Board as a temporary Federal agency separate from the FCA and provided that its operating expenses would be paid by the Farm Credit Assistance Fund (Sec. 6.25 of the 1971 Act). Monies for this fund come from debt obligations issued by the Assistance Corporation and payments from System institutions as provided by Sec. 6.28 of the 1971 Act, as amended. The Revolving Fund, which is temporarily available to the Assistance Board, had an unobligated balance as of the 1985 Farm Credit Act Amendments and the 1987 Act of $259,799,000.

Question. Will this money be repaid by the Assistance Board?

Answer. The statute provides that any of the Revolving Fund moneys used by the Assistance Board will be reimbursed to the Revolving Fund from the Assistance Fund within the same year as such funds were received by the Assistance Board (Sec. 6.7 of the 1971 Act).

LOAN LOSS RESERVES

Question. Mr. Naylor, on page 2 of your statement, you say that financially troubled system institutions are "required to set aside reserves for protection against probable future losses." Isn't this a bit misleading?

Don't all financial institutions establish allowances for loan losses whether they are troubled or not?

Is there a difference for reserve set-asides between troubled and untroubled institutions?

Answer. As your question accurately points out, all financial institutions are required to establish and maintain an allowance for loan losses, whether troubled or not. Each institution's allowance is required to be adequate for all inherent losses estimated to be in its loan portfolio. As a practical matter, a troubled lending institution routinely experiences more loan losses and will require a larger allowance for loan losses than non-troubled institutions. The sentence in question was intended to focus on this point, because several System institutions which have made reversals to their loan loss allowances remain troubled.

Question. You also indicate, Mr. Naylor, that the $1.994 billion in loan loss provisions add to the system's 1987 net income. What net income? Don't you mean that this change reduced net losses?

Therefore, on page 4 of your statement, Mr. Naylor, where you state that "without allowance for loan losses reversals, the system would have lost $1.485 billion," isn't that incorrect?

Answer. Upon review with staff the correct figure on page 2 should have read "$439.3 million in loan loss provisions have been reversed and added to the System's net income in 1987". I apologize for the error in the number and appreciate the opportunity to correct the statement. To provide more complete information for the record I am providing also the Systemwide activity in the allowance for loan loss accounts during 1986 and 1987 as disclosed to investors which is summarized as follows:

	millions	
	87	86
Beginning Balance	3,635.3	3,189.6
Charge-offs	(798.9)	(1,661.6)
Recoveries	310.5	309.6
Provisions	243.4	1,798.8
Reversals	(439.3)	(1.1)
Ending Balance	2,951.0	3,635.3

The comments on page 4 of my testimony relating to system losses were meant to refer to the System's own projections made earlier on for 1987. These projections were made based on large anticipated provisions for losses during the year rather than the net reversals that occurred. The statement was intended to focus attention on the very substantial changes to expected results which occurred from changing conditions and resulted in major revisions to the System's expected handling of its loan loss reserves during 1987. It was the impact of these significant changes that lead to the dramatic revision in operating results from what had been projected at the beginning of the year. I appreciate the opportunity to clarify and comment further on this point.

Question. Would the correct statement be that losses would have been $213 million by adding the $17 million reported loss to the $196 gain achieved from loan loss reversals?

Answer. The correct statement of what the 1987 System loss based on actual results would have been without reversals of provisions to the allowance for loan losses is $456.8 million; the total of the $439.3 million in reversals and the $17.5 million loss as reported. The $196 million mentioned in your question is the net amount of reversed provisions to the allowance in 1987; that is, the $439.3 in reversals taken by some institutions, minus the positive provisions of $243.4 million made by others.

Question. On page 4 of your statement, you state that net income for 1987 was $509 million. Don't you mean net interest income?

Answer. Yes, my comment was intended to refer to the System's 1987 net interest income of $509 million before provision for losses.

Question. Mr. Naylor, in your statement you say that the system reversed its provisions for loan losses by $1.994 billion. Isn't your statement very misleading? Didn't this reversal, in fact, result in a $196 million reduction in the loan loss reserves?

Answer. Upon review with staff the correct figure on page 2 should have read "$439.3 million in loan loss provisions have been reversed and added to the System's net income in 1987". I appreciate the opportunity to clarify this matter and apologize for the error in the number.

ASSISTANCE BOARD

Question. Mr. Naylor, what steps have been taken to coordinate your actions as a regulator with the mandate which the assistance board has to provide oversight and assistance?

Answer. The FCA is acting in accordance with the 1987 Act, which spelled out the specific authorities of the FCA as the arm's-length regulatory agency and the Assistance Board's duties. We have cooperated fully with the Assistance Board's requests for technical information such as financial data and analysis, but in recognition of our separate roles envisioned by the Act, the FCA has made no recommendations to the Assistance Board regarding its decisions and actions.

AGENCY HEADQUARTERS

Question. Some concern has been raised about the location of the Farm Credit Administration. Apparently, the building that you are in has appreciated significantly. Have you appraised the value of your location?

Answer. Yes. The current appraised value ranges between $33.5 million and $36.8 million, depending upon the capitalization rate used.

Question. Would it be prudent, since the building is owned by the 37 banks, to sell it and move to a less costly location?

Answer. The FCA's net cost per square foot is $17.00. The GSA rate in Washington, DC, is $30-35 per square foot. To house FCA elsewhere in the metropolitan area would increase the cost to the

Farm Credit System by $3-3.5 million annually, as a result of increased per square foot rental, loss of tax depreciation, and loss of offsetting tenant revenues.

REGULATING COSTS

Question. I have seen an analysis of the administrative costs of several regulatory agencies. If we could compare the Farm Credit Administration with the Federal Deposit Insurance Corporation and the Office of the Comptroller of the Currency, some interesting results occur. For example, if we look at the number of institutions regulated, the cost per institution for the Farm Credit Administration is $70,000. For FDIC, that cost is $18,000, and for the Comptroller of the Currency, the cost is $40,000. Also, assuming that the Farm Credit Administration examines each of its institutions every year, the cost per examination is considerably higher than the other regulators. For every two institutions, three FCA employees are needed, which is twice the amount of employees needed to regulate a similar number of institutions by the Office of the Comptroller of Currency, and about four times the amount that is needed by the Federal Deposit Insurance Corporation. Can you justify these large discrepancies?

Answer. The Farm Credit Amendments Act of 1985, effective December 23, 1985, placed the direct regulatory examination authority for over 424 System institutions on the FCA. Farm Credit System institutions are highly decentralized, single-industry, single-purpose lenders and most are financially troubled or are so critical that their continued operation threatens their future viability if operating conditions are not corrected. Such circumstances create the need for direct onsite examination in addition to continuous offsite surveillance to ensure the continued safe and sound operations of the System. The FCA is operating in as efficient a manner as possible given the current environment and the Congressional mandate to ensure the safe and sound condition of the System while ensuring the availability of adequate credit for American agriculture.

Question. It is my understanding that the Comptroller of the Currency evaluates its operating expenses based on the assets it regulates. Would it make sense to evaluate FCA's expenses in a similar manner?

Answer. No, I do not believe that the manner in which the OCC is able to regulate national banks would be relevant to the FCA and the institutions comprising the System. First, the OCC, in terms of assets regulated, deals with financial institutions that are also affected by the oversight of, for example, the FDIC, the Federal Reserve, and perhaps the Securities and Exchange Commission. Consequently, the offsite surveillance techniques shared by these regulators are often broader, and they are not required to provide prior approvals of institutions' actions as the Farm Credit Act of 1971 had required up to passage of the 1987 Act. Second, the structure, single-industry lending, and the financial condition of the System do not provide a proper comparison.

Question. What do you feel would be an appropriate percentage to make such an evaluation?

Answer. As previously stated, I do not believe the use of such a percentage is appropriate given the current condition, operating environment and structure of the System. Until the effects of the Agricultural Credit Act of 1987 are fully implemented, creating the new structure of the System, meaningful comparisons in terms of asset-based evaluations will be difficult to develop.

Question. If basing such an evaluation on assets would be inappropriate, would a basis on amount of loans outstanding be reasonable? For example, what do you think of a five-basis point ratio? In other words, with a $50 billion portfolio, an operating expense of $25 million would be allowed?

Answer. The Farm Credit System institutions' assets are largely loans and loan-related assets such as acquired property; therefore, assessments of FCA operating expenses based on assets versus loans and loan-related assets would not differ significantly. Establishing a ratio of operating expenses to assets or loans would be unwise given the System's perilous condition and the possible effects of the Agricultural Credit Act of 1987.

Question. Mr. Duncan, in your statement, you say that FCA has been able to maintain in your Direct Examination Program, the lowest cost per examiner of any Federal regulator or financial institution. My analysis does not show that to be the case as far as the National Credit Union Administration is concerned, but putting that aside, it would appear that if we approve your fiscal year 1989 proposal, your cost per employee would reach $64,000, which would then be higher than the 1987 cost, for FDIC, the Federal Reserve System, or the Office of the Comptroller of the Currency. My question is: What should be a proper basis for comparison -- cost per employee; cost per examiner; cost per loan volume; cost per total assets; cost per regulated institution; or some other analysis? Or should it be a combination of all of the above?

Answer. The direct examination cost mentioned in my statement is the cost per employee of the FCA's Office of Examination. The statement was made to exemplify the burden being carried by FCA concerning the relatively high level of inexperienced examiners employed. More than one-half of FCA's examiners were hired within the past two years due to the effect of the Farm Credit Amendments Act of 1985 that placed the direct examination requirements of all System institutions on the FCA. Consequently, the FCA hired over 100 of its core of 300 field examiners from college campuses and commenced an intensive formal on-the-job training program. The direct cost per examiner, consisting of salary, benefits, and travel expenses, denotes the relatively low examination staff pay level, which will probably increase to match important responsibilities assigned to the FCA's examination staff.

What should be a proper basis for comparison? So long as the FCA's examination schedule is calendar driven, with each institution examined each year, the comparison that makes the greatest sense is cost per regulated institution, keeping in mind the high level of problem institutions within the total number regulated.

FARM CREDIT REVOLVING FUND

Question. When the farm credit revolving fund was established in 1971, how much money was put into it?

Answer. Section 4.0 of the Farm Credit Act of 1971, as originally enacted, continued the Short-term Investment and the Banks for Cooperatives Revolving Funds that were created by prior Farm Credit Acts to provide startup capital for PCAs, FICBs, and BCs. The 1971 Act authorized the Governor to purchase stock in those institutions as a temporary investment designed to meet emergency credit needs of their borrowers. At that time, the PCA/FICB fund had an authorized level of $130 million and an unobligated balance of $111,708,000. The authorized level for the BC fund was $150 million with an unobligated balance of $148,091,000. The 1985 Amendments to the Act consolidated both funds into the Capital Corporation Investment Fund with an unobligated balance of $259,799,000.

Question. What is the current balance?

Answer. The Agricultural Credit Act of 1987 (P.L. 100-233) transferred the fund to the Farm Credit System Assistance Board for its use on an interim basis. The balance at the time of the transfer was $259,799,000. We would have to defer to the Assistance Board to provide the correct information to this question. Once the Assistance Fund is established, the revolving fund is to be repaid.

Question. How much money has been used from that fund in 1988?

Answer. The Assistance Board is the appropriate party to provide this information.

Question. How much money is projected to be used from that fund for the remainder of 1988?

Answer. The FCA has not made this projection. We would have to defer to the Assistance Board for this information.

Question. What are the expected uses of revolving fund monies in fiscal year 1989?

Answer. Again, we refer you to the Assistance Board for this information.

Question. Who controls this fund?

Answer. The fund is currently under the control of the Assistance Board. The 1987 Act provides that all amounts in the revolving fund will be transferred to the Farm Credit Insurance Fund on January 6, 1989.

Question. Is there an assessment on system members to provide capital for this fund? If so, how is the assessment made; how often; and on which system members?

Answer. System institutions are not assessed for the revolving fund provided by Sec. 4.0 of the 1971 Act.

TRAVEL

Question. Apparently, Agency board members and some others travel abroad on occasion. Is this at the expense of the system? If so, what are the purposes of this travel?

Answer. The FCA has participated, as have other U.S. financial regulators, in international financial organizations. The FCA has had a long and positive history of association with comparable governmental bodies and agricultural credit institutions of other nations.

FCA's affiliation and participation is limited but important. Continuing FCA's limited contacts with foreign investor groups and international agricultural credit organizations will help ensure broadened access by Farm Credit Banks to reasonable priced loanable funds for farmers and ranchers.

The sizeable investment interest by foreign governments and foreign institutional investors in Farm Credit Banks' securities brings the FCA in contact with these parties. Foreign investors and foreign central banks place particular confidence in communication with financial regulators.

During the recent period of uncertainty for the Farm Credit institutions, and while the Congress was considering assistance legislation, the FCA took steps to reduce unwarranted apprehension among foreign investors in Farm Credit securities because of misinformation and rumor would have increased Farm Credit institutions' funding costs and interest rates to farmer borrowers.

Visits with investors and presentations at international agricultural finance conferences were for the purpose of conveying accurate and timely information to minimize unwarranted apprehension and to prevent its adverse effect on Farm Credit Banks' borrowing costs.

Question. Some have noticed that administrative assistants travel with at least two of the board members wherever they go. Is this a necessary expense or could this be cut?

Answer. It is not true that Executive Assistants travel with Board Members wherever they go. The FCA is involved intensively and extensively in litigation with System entities. It is essential that a third party be present if possible as a witness when FCA Board Members meet with officials of the System to preclude jeopardizing current or potential law suits.

Question. Do the agency board members have chauffeurs and special automobiles? Is this prudent use of farmer's money?

Answer. The agency has pool vehicles that are available for use by employees on official agency business and for courier service to other Government agencies and Congress. On an average, approximately 60% of vehicle use is for necessary courier runs. The individuals who drive do so as a collateral duty with their primary duties being in duplicating, mail distribution, and supply. With an average round-trip taxi fare for one person of $40.00 and one-way courier fee of $15.00, the use of agency-leased vehicles has proven cost effective.

Question. The agency is exempt from government travel cost restriction. How much more does this cost the system extra on an annual basis?

Answer. The FCA is not exempt from the Federal travel regulations. Travel policy for FCA employees is in strict conformance with GSA regulations. Board Members (by Member practice) have also adhered to Government travel restrictions.

GENERAL

Question. How much money is currently in the system?

Answer. System total capital was $5.030 billion at December 31, 1987, down from $5.641 billion a year earlier.

Question. What is the current status of litigation involving the Farm Credit System?

Answer. A summary of the 46 lawsuits pending that involve the FCA is provided in the Chairman's written testimony.

Question. What is the current number of loan accounts in the Federal land banks and the production credit associations and how has that number changed from a year ago?

Answer. The System reported to the FCA that yearend 1987 loan accounts decreased to nearly 225,000 for PCAs and 465,000 for FLBAs from yearend 1986 totals of approximately 250,000 for PCAs and 515,000 for FLBAs.

Question. Please provide the committee with a list of interest rate adjustment requests you received in 1987, and so far in 1988 and your action on them.

Answer. The Farm Credit Act Amendments of 1986 removed the FCA's authority to approve interest rates on loans of System institutions. In October 1986, the FCA stopped approving adjustments to loan rates by System institutions. In the course of regular FCA examinations, adequacy of a System institution's earnings is reviewed as it impacts the safety and soundness of that institution's operations.

Question. Please provide the committee with the number of FLBA & PCA accounts in foreclosure and bankruptcy as of December 31, 1987.

Answer. The System reported to the FCA that loan accounts in bankruptcy and/or foreclosure totaled nearly 4,000 for PCAs and 14,000 for FLBAs at yearend 1987. These totals remained relatively unchanged from yearend 1986.

Question. Mr. Naylor, to what degree have you, as chairman, and the FCA board as a whole, delegated away decision-making authority to staff, and do you intend to delegate further board powers in the future?

Answer. The Chairman serves as the Chief Executive Officer for the Agency's day-to-day operations. The Board meets at least monthly, or more often, under the provisions of the Government in the Sunshine Act to act on all agency policy issues, enforcement actions, regulations and prior approval actions. Actions of this type have not been delegated by the Board. The Board generally has a full agenda which it disposes of according to the statutes of the Farm Credit Act of 1971, as amended.

FARM CREDIT SYSTEM INSURANCE CORPORATION

Question. The Farm Credit System Insurance Corporation was established to ensure the timely payment of principal and interest on Farm Credit System obligations. The board of the Farm Credit Administration will serve as the Board of Directors for the Insurance Corporation which is to begin operation in January, 1989. How will this insurance corporation function?

Answer. The 1987 Act established a Farm Credit System Insurance Corporation and a Farm Credit Insurance Fund to insure the timely payment of principal and interest on notes, bonds, debentures and other obligations of eligible and participating System institutions. This fund will begin insuring obligations January 5, 1993. Joint and several liability of System institutions for System debt obligations is maintained. However, it will only be triggered if all of the monies in the insurance fund are exhausted.

The Insurance Corporation was established on January 6, 1988, and is managed by its board of directors, which consists of the FCA Board, and chaired by a member other than the FCA Chairman. Its operating costs are to be paid by the Insurance Fund.

Question. What will its source of revenue be?

Answer. The Fund is initially capitalized by the FCA revolving fund provided by Sec. 4.0 of the 1971 Act. Beginning not later than January 5, 1989, each System bank shall become insured and subject to the new provisions of law governing the Corporation and its powers.

System institutions are to make the initial premium payment in January 1990, with payments based on accruing and nonaccruing loan volume of each bank for calendar year 1989. The Act specifies that in the first year the annual insurance premiums of an institution shall be equal to .0015 percent of the accruing and .0025 percent of the nonaccruing loans of the institution. When the fund reaches 2 percent of the aggregate outstanding insured obligations of System institutions, which is called the secure base amount, or such other amount as the Insurance Corporation determines is actuarially sound, the Corporation will set the premiums.

Question. How will it make payments and how will it generate capital?

Answer. Insurance coverage is to begin five years after enactment, with the Insurance Corporation expending funds to meet the following obligations of System institutions: timely payment of interest and principal on insured obligations; to satisfy institution defaults on repurchase of preferred stock issued in accordance with assistance; and the retirement at par of eligible borrower stock, which is generally stock currently outstanding or issued within 9 months of the date of enactment.

Section 5.62 of the 1971 Act provides that Insurance Fund moneys not otherwise employed shall be invested in obligations of or guaranteed by the United States.

FEDERAL AGRICULTURAL MORTGAGE CORPORATION

Question. Another new Farm Credit System institution is the Federal Agricultural Mortgage Corporation. What is the purpose of this corporation?

Answer. The Federal Agricultural Mortgage Corporation (FAMC or "Farmer Mac") was established by the 1987 Act to facilitate the development of a secondary market for agricultural real estate loans. It is a federally chartered instrumentality within the Farm Credit System.

Question. How will it operate?

Answer. Qualified agricultural real estate mortgages will be sold on a nonrecourse basis by loan originators to certified agricultural mortgage marketing facilities (poolers). The loan originators, which are defined by the law to include any System institution or other specified entity that originates and services agricultural mortgages, are permitted to retain loan servicing rights. The poolers, which may be a System institution or corporation, association, or trust organized under U.S. or state law, must meet statutory criteria and standards set by the FAMC. The poolers package the loans into pools that serve as collateral for securities purchased by the investing public.

The FAMC guarantees timely payment of principal and interest on securities issued by a certified facility. The FAMC sets the underwriting, security appraisal and repayment standards in consultation with originators and determines the eligibility of poolers to be certified. Each certified facility makes application to the FAMC for this guarantee.

The FAMC can purchase or sell securities for investment purposes for its own account, but it is restricted by the law from originating or pooling loans.

FAMC's Guarantee

To qualify for the FAMC's repayment guarantee, the certified facility and participating loan originators are responsible for maintaining a reserve, or retained subordinated participating interest, equal to 10 percent of the unpaid principal of each loan in a pool. This reserve must be exhausted before the FAMC guarantee would be activated.

The FAMC is to create a special reserve to fund its guarantee by assessing each pooling firm a percentage of the total loan pool based on risk factors of up to statutorily specified amounts.

This reserve is backed by a $1.5 billion Federal line of credit for the Secretary of Treasury to purchase FAMC obligations solely for the purpose of the FAMC fulfilling its obligations under its guarantee.

Specifications for Qualified Loans and Pools

The FAMC's Board is authorized to set standards for qualified loans and pools of qualified loans, subject to Congressional review. The law specifies that these standards are not to discriminate against small originators or small agricultural mortgage loans that are of at least $50,000. Other minimum standards are set by the statute.

Specific borrowers rights provisions applying to System lenders shall not apply to loans in the secondary market. The law requires that System borrowers be notified of this and be given three days after the date of loan commitment to elect that their loan either be covered by the specific rights or available to be pooled in the secondary market.

FAMC Stock and Board of Directors

The law provides that although the FAMC is chartered as a System entity, it is not liable for any debt or obligation of any other System institution and no other System institution is liable for the FAMC's debt.

The FAMC is owned jointly by System institutions and other financial or lending entities. The Act provides for an initial $20 million of voting common stock to be offered to commercial banks, other financial entities, insurance companies and System institutions. Additional voting stock may also be issued, but only to loan originators and poolers. The FAMC may also issue freely transferable nonvoting common stock and preferred stock.

The initial start-up and organization of the FAMC will occur under a nine-member board appointed by the President. The permanent 15-member Board of Directors is to be in place as soon as $20 million of voting common stock is subscribed and paid and a quorum of eight directors are elected or appointed.

Ten of the 15 Board members are to be elected annually, five by System holders of FAMC stock and five by other holders of FAMC stock. Five are Presidential appointees, with the advise and consent of the Senate, to serve at the President's pleasure. These appointees are to represent the public, with at least two of them experienced in farming or ranching, and no more than three from the same political party. The President designates the FAMC Board chairman from among the appointed members.

Regulatory and other requirements

FAMC securities are not "government securities" as defined by the Securities Exchange Act of 1934 or the Investment Company Act of 1940. For purposes of section 3(a)(2) of the Securities Act of 1933, they are not securities issued or guaranteed by a person controlled, supervised or acting as an instrumentality of the U.S. The securities must also clearly indicate that they are not obligations of, and are not guaranteed as to principal or interest by the FCA, the United States, or any other agency or instrumentality of the United States other than the FAMC. Therefore, they must be traded as high-grade corporate debt obligations and registered with the Securities Exchange Commission. The law exempts the securities from the registration and qualification standards of any state law unless the state enacts an override statute within eight years.

The FCA is required to examine the FAMC at least once a year. The FAMC is also to be audited by the General Accounting Office (GAO) which is to report annually to Congress.

The law limits the volume of commercial loan pools that may receive FAMC guarantees during the next three years. During the first year, FAMC guarantees cannot exceed two percent of all outstanding commercial and System agricultural real estate debt. These percentages increase to 4 percent in the second year, and 8 percent in the third year. The volume of System loan pools is not affected by these limits.

Question. There are a number of other Farm Credit System entities which add to the complication and confusion surrounding the Farm Credit System. Could you please provide for the committee a brief statement of each of these entities, its purpose, and method of operation: Farm Credit Corporation of America; Farm Credit System Financial Assistance Corporation; Federal Farm Credit Banks Funding Corporation; Farm Credit Leasing Services Corporation; and Farm Credit Council.

Answer. The Farm Credit Corporation of America (FCCA), chartered in 1985, develops and recommends policy for approval by System Banks. The FCCA is owned by 34 of the 37 Farm Credit Banks, and is located in Denver, Colorado. It develops and implements the System's national credit, financial and information processing and reporting standards, serves as the System's national spokesperson, when authorized to speak on specific issues by the Farm Credit Banks, and facilitates the System's strategic planning process.

The FCCA board of directors consists of representatives from each member Farm Credit district board of directors and a director of the Central Bank for Cooperatives.

The Farm Credit System Financial Assistance Corporation is established by the 1987 Act to provide capital to System institutions that are experiencing financial difficulty and have been certified by the Assistance Board. It is authorized to issue up to $4 billion in 15-year uncollateralized bond obligations guaranteed by the U.S. Treasury.

The FCA chartered the Assistance Corporation on January 11, 1988. The Board of Directors of the Federal Farm Credit Banks Funding Corporation currently serves as the Corporation's Board. The Assistance Corporation is authorized to elect its chairman annually.

The Federal Farm Credit Banks Funding Corporation (Funding Corporation) is established by Sec. 4.9 of the Farm Credit Act of 1971, as amended, to issue, market and handle the System's securities. The Farm Credit Banks are funded principally through the sale of these securities, which are neither obligations of nor guaranteed by the U.S. government. The Funding Corporation, located in New York City, manages a selling group of investment dealers and dealer banks who offer Farm Credit securities. Farm Credit securities are sold worldwide to all types of investors--commercial banks, savings and loan associations, individuals, insurance companies, states and municipalities, pension and money-market funds, foreign banks and governments and others.

The 1987 Act provides that the Board of Directors of the Funding Corporation shall consist of nine voting members and one nonvoting member. Of the voting members, four shall be current or former directors of System banks elected by the shareholders of the Funding Corporation and three shall be chief executive officers or presidents of System banks elected by the shareholders of the Corporation. These members appoint the other two voting members, who must be United States citizens and experienced or knowledgeable in corporate and public finance, agricultural economics, and financial reporting and disclosure, but not affiliated with the System, the FCA, or actively engaged with a bank or investment organization that is a member of the Corporation's selling group for Systemwide securities. The president of the Funding Corporation serves as a nonvoting member of the Board.

The Farm Credit Leasing Services Corporation (Leasing Services Corporation) was established in 1983 to provide expanded leasing services for agricultural producers and cooperatives on a Systemwide basis. The Leasing Services Corporation is headquartered in Minneapolis, Minnesota, and is owned by 19 Farm Credit banks that elected to participate. The Leasing Services Corporation has a nine-member board of directors.

In 1983, the 37 Farm Credit Banks established The Farm Credit Council in Washington, D.C. The Farm Credit Council is a federated trade association, affiliated with the National Council of Farmer Cooperatives, representing the interests of the Farm Credit System and other cooperative farm lending institutions before Congress and the administration. The Farm Credit Council is not chartered or examined by the FCA.

The Farm Credit Council is governed by a 13-member board of directors. One member is elected by and from each of the 12 district Farm Credit boards and the Central Bank for Cooperatives board of directors. Members of The Farm Credit Council board and the Farm Credit Corporation of America board are the same.

SYSTEM SERVICE ORGANIZATIONS

Question. Your budget justification indicates that the Farm Credit System is comprised of 12 Federal Land Banks; 12 Federal Intermediate Credit Banks; 13 Banks for Cooperatives; 382 Federal Land Bank Associations and Production Credit Associations, and various system service organizations. What are the various system service organizations?

Answer. The service organizations include those discussed in the preceding question: the Farm Credit Corporation of America, the Funding Corporation, and the Leasing Corporation. The Farm Credit Act of 1971, as amended, (Sec. 1.2 and 4.25-4.28) provides for the establishment of service organizations within the System, as chartered and regulated by the FCA.

Question. How many are there?

Answer. Three such service organizations are currently chartered and regulated by the FCA.

Question. What is their composition? What services do they perform?

Answer. The composition and function of each of these service organizations is provided in response to preceding questions.

Question. What is their source of funding?

Answer. These service organizations are funded by System institutions that use their services, or in the case of the Leasing Corporation, that own a part of it.

SYSTEM FORBEARANCE POLICY

Question. Have you ensured that each system has a forbearance policy?

Answer. Yes. In accordance with the Farm Credit Amendments Act of 1985, existing FCA regulations require that each District have a forbearance policy adopted by its board of directors. This policy is the policy of all associations and banks in the District. Such policies are to be provided to borrowers under certain circumstances such as prior to the initiation of collection action. The 1987 Act requires qualified lenders to have a policy concerning restructuring of distressed loans in place within 60 days of enactment. The statute also provides that these policies be submitted to the FCA.

Question. Are you monitoring the Systems' conformance with your regulations on this matter?

Answer. Yes. FCA examination staff has been assessing compliance with existing regulations through onsite verification, and will continue to do so with respect to the requirements of the 1987 Act.

Question. Are all systems in conformance?

Answer. The FCA completed one full examination cycle in accordance with the borrower rights provisions of the 1985 Act. Any noncompliance has been or is being corrected through supervisory and enforcement actions by the FCA. In addition, the agency has received copies of the debt restructuring policies required under the 1987 Act from all Farm Credit Districts.

ASSESSMENTS

Question. For fiscal year 1987 and estimated for fiscal years 1988 and 1989, please provide the Committee with the assessments; sub-allocations; and refunds for the Federal Land Banks; Intermediate Credit Banks; and Banks for Cooperatives.

Answer.

Assessments	FY 1987	FY 1988
Federal land banks	$17,497,363.70	$16,159,037.10
Intermediate credit banks	17,497,363.70	16,159,037.10
Banks for cooperatives	4,425,539.60	4,087,026.80
	$39,420,267.00	$36,405,101.00

Refunds	
Federal land banks	$ 3,688,202.33
Intermediate credit banks	3,688,202.33
Banks for cooperatives	932,842.48
	$ 8,309,247.14

The fourth quarter assessment for FY 1988 will be reduced to reflect the Congressional limitation of $35 million for administrative expenses. FY 1989 assessments are based on 1988 end-of-year financial status of each banking group. Assessments are sub-allocated by each banking group, not FCA. If expenditures for FY 1988 continue at the present rate, the refunds to the System would be less than $1 million. Refunds for FY 1989 cannot be estimated at this early date.

QUESTION SUBMITTED BY SENATOR SASSER

Question. There are several cases now in litigation regarding the transfer of funds from sound institutions to those which are struggling. It seems to me that the assessment on institutions and the financial assistance called for in the agricultural credit act could eliminate the need for these transfers, and thus the legal proceeding. Do you foresee this happening?

Answer. Yes, Senator Sasser, there are nearly two dozen legal challenges in the courts on the issue of assistance from the healthy institutions to the less healthy. Many parties assumed that with the provisions of the Agricultural Credit Act of 1987 this litigation would be withdrawn. Unfortunately, to date, this has not been the case. It is expected that sometime in the future we will see an end to these law suits, but, so far we have seen little movement in this regard by System institutions.

QUESTIONS SUBMITTED BY SENATOR BUMPERS

Question. Please compare FCA's budget with the budget of other financial regulators in relation to the volume of assets examined. Also, please compare the number of employees.

Answer. Comparison of the budgets of Federal financial institution regulators is somewhat misleading due to the differences in the institutions regulated and the overlapping regulatory responsibilities of the different federal financial regulators and state banking departments. The FCA, beginning with the Farm Credit Amendments Act of 1985, which became effective December 23, 1985, is charged with the annual examination of each Farm Credit System institution. Such an annual examination requirement for lending institutions specializing in a single industry creates the need for a regulatory strategy different than, say, the Office of the Comptroller of the Currency with respect to national banks, many of which are not seriously troubled institutions. The total agency expenses of the FCA compared with other regulators is $36.4 million versus $227 million for the OCC, $621.0 million for the FDIC, $54.4 million for the NCUA, and $140 million for the Federal Reserve. System assets regulated by FCA total $62.2 billion outstanding versus $1.8 trillion for the OCC, $914 billion for the FDIC, $115 billion for the NCUA, and $600 billion for the Fed. The FCA has 590 authorized positions versus 3,300 employees for the OCC, 8,997 for the FDIC, 861 for the NCUA, and 1,400 for the Fed.

Of the 424 institutions regulated by the FCA, approximately one-half are considered seriously troubled or critical institutions with regard to their asset quality, capital levels, earnings abilities, management, or long-term viability. This compares to the OCC and the FDIC with 6 and 18 percent, respectively.

Question. The one-time assessment included in the Agricultural Credit Act of 1987, as drafted, will threaten the viability of several associations around the country, in particular, the Delta PCA in Arkansas that will lose 72% of its surplus used to help keep its interest rates competitive. Do you favor retaining this provision unamended even if it threatens the viability of some associations? Can you suggest any alternatives that would provide for a fair assessment without threatening viability?

Answer. The statute establishes the one-time assessment of unallocated retained earnings (URE) in excess of 13 percent of an association's total assets and in excess of 5 percent of a System bank's total assets. During Congressional consideration of the 1987 Act, the FCA staff provided technical assistance and financial data as requested by the House and Senate Agriculture Committees, but as a regulatory agency, the FCA did not take a position on what would be the appropriate percentage basis for such an assessment or other alternatives to Congress. Furthermore, the FCA is currently involved in litigation on this issue.

We would note that a Senate floor amendment addressing this issue became part of the Agricultural Credit Act, providing for reallocation of this assessment between associations and the district bank, subject to unanimous consent of the bank and associations that would be affected.

Question. Does the FCA support legislation to restore to PCA's and BC's the ability to reserve for bad debt under the tax code?

Answer. Yes. The FCA Board has agreed in concept that Farm Credit System institutions should also be allowed to use the reserve method of accounting for loan losses for federal tax purposes which was granted other financial institutions by the Tax Reform Act of 1986. Other commercial lending institutions were granted this exception under certain circumstances which are not dissimilar to conditions found among many of the PCAs and BCs in the System.

Question. Are you confident the FCA will be able to implement regulations on a timely basis as established in the ACA of 1987? Will the FCA give prompt attention and make a timely decision on the merger proposals to be made by the Bank for Cooperatives? What criteria will be used in evaluating these proposals?

Answer. The FCA is making every effort to promulgate regulations in accordance with the time frames established by the 1987 Act.

The FCA has received and is reviewing the prospectus for the merger of System BCs, as required by the 1987 Act. The FCA's role in reviewing these merger documents is to assure that adequate and meaningful disclosure is made to the eligible voters who will be voting on the possible merging of BCs allowed by the Act.

Question. Recently, three Banks requested assistance from the government. Can you assure that the FCA will offer no impediments to needed financial assistance under terms of the Act, including the doling out of meager amounts of assistance so that the Banks can limp along until the change in Administrations?

Answer. The 1987 Act provides that System institutions apply to the Farm Credit System Assistance Board for financial assistance. The determination to provide financial assistance and in what sums is the responsibility of the Assistance Board. I assure you that the FCA, in its appropriate arm's-length regulatory role, will not impede this process.

Question. Can you assure that if any institution is liquidated that it will be done in a way so as to prevent damage to other Banks?

Answer. FCA regulations providing for the liquidation of System institutions contain procedures similar to those provided for with respect to other Federal financial institutions. The receiver of the institution collects on the assets of the institution in order to pay the institution's creditors and make a final distribution to stockholders of the remaining net worth of the institution. If a bank is placed in liquidation, it has the potential for not being able to satisfy its obligations on Systemwide and consolidated bonds. Under certain circumstances, the contractual and statutory provisions relating to joint and several liability could be invoked to insure that the bondholders are paid in full. If joint and several liability were invoked, other System banks would be required to make payments on any bond which the defaulting institution is unable to make based on the banks' relative financial strength as measured by their remaining collateral. This is a statutorily mandated formula which is designed to shift the burden of joint and several liabilities to those institutions with the greatest capacity to bear it.

Question. What relationship is proper between regulator and regulated financial institution? Is an arm's-length relationship proper or is it proper for regulators to become involved in management decisions? Has the FCA gotten involved in management decisions?

Answer. The 1987 Act reaffirmed the FCA's role as an arm's-length regulator. The FCA Statement of Mission, which was approved by the FCA Board on February 2, 1988, summarizes the FCA Board's position on the agency's appropriate regulatory role.

[copy of statement follows:]

Farm Credit Administration
Statement of Mission

Approved by the Board February 2, 1988

The Farm Credit Administration is an independent federal financial institutions regulatory agency of the United States government with regulatory, examination and supervisory responsibilities for the Farm Credit System banks, associations, and related institutions chartered under the Farm Credit Act of 1971. The Farm Credit Administration is directed by a three-member, Presidentially appointed, board. This board is responsible for Farm Credit Administration policy, regulation promulgation, enforcement activities, and general oversight of agency operations.

As a financial regulator, the Farm Credit Administration is responsible for promulgating regulations to implement the Farm Credit Act and other applicable laws and for promoting the safety and soundness of Farm Credit System institutions. The Farm Credit Administration fulfills this responsibility through such regulatory actions as the examination of system institutions and the enforcement of regulations.

Regulatory actions are designed to promote adequate disclosure of the institutions' financial condition, to protect the financial interests of the member stockholders who own the Farm Credit System and the investors who buy the securities of the Farm Credit Banks. Where necessary, the agency exercises enforcement powers to promote safety and soundness and to protect the public interest.

Where the Farm Credit Administration, through its examination process or through other means, discovers violations of law and/or regulations, or institutions operating in an unsafe and unsound manner, the agency has the responsibility and authority to institute appropriate formal enforcement actions to promote the prompt correction of the situation by the directors and management of the institution in question.

The members of the Farm Credit Administration Board and Farm Credit Administration personnel do not involve themselves in management and operating decisions of the Farm Credit System institutions. Rather, the agency affects management and operation through its examination and supervisory process, regulatory controls, and legislatively mandated prior-approvals of management actions. These are carried out in accord with Farm Credit Administration Board approved regulations and internal policies.

QUESTIONS SUBMITTED BY SENATOR COCHRAN

BUDGET ESTIMATES

Question. Your budget justification states that the extensive reorganization of the System mandated by the Agricultural Credit Act of 1987 will increase the workload of the FCA. Does your budget request include an estimate for these increased activities? If not, when will you have a more accurate estimate?

Answer. The FY 1989 budget proposal includes some provisions for those new activities for which costs can currently be identified; e.g., initial contractual support in analyzing secondary market alternatives and regulatory requirements. The workload resulting from System reorganization, however, is not known at this time. Once the System's plans are clarified, we will be able to better assess the impact on the FCA's resources.

FARM CREDIT REVOLVING FUND

Question. I understand the Farm Credit Revolving Fund has been made available to the Farm Credit System Assistance Board, but that any funds so used will be paid back into the fund. How much is presently in the Revolving Fund and what will eventually happen to these funds?

Answer. The unobligated balance of the Revolving Fund when the Agricultural Credit Act of 1987 was enacted was $259,799,000. As explained in response to an earlier question by Chairman Burdick, this fund was temporarily transferred to the Assistance Board for its use, with the requirement that any funds used would be reimbursed once the Assistance Fund is established, but no later than the close of the fiscal year. The Assistance Board would be able to provide information regarding the Fund's current balance. The statute provides that all amounts in the revolving fund will be transferred to the Farm Credit Insurance Fund on January 6, 1989.

FCA LITIGATION

Question. Mr. Naylor, in your statement you provide a summary of FCA's pending litigation. However, you don't discuss the costs associated with these activities. How much in time and money is required on law suits involving the FCA? Do these funds also come from the assessments against the institutions of the Farm Credit System?

Answer. It is not easy to quantify the staff hours and money spent on certain lawsuits involving the FCA. For example, although the agency has four attorneys handling litigation, a sizeable portion of their work may relate to FCA enforcement actions. This is not considering the expenses of support staff, travel, office space or other administrative costs, or the FCA's legal library facilities. In addition, the time of other FCA professional staff not specifically designated to handle litigation also may be involved. Because all FCA administrative expenses are paid for by System institutions through assessments, all of the FCA's costs resulting from litigation are paid for by the System.

As a Federal agency, the FCA is represented by the Department of Justice, whose budget is paid for by all taxpayers. Although we cannot quantify the Justice Department's time and resources spent on FCA lawsuits, it is safe to say that each hour of FCA attorney time is at least matched by Justice Department attorney time.

FARM CREDIT SYSTEM ASSISTANCE BOARD

Question. Could you describe the working arrangement or relationship that FCA has with the Assistance Board. Are there any formal agreements between the Assistance Board and FCA?

Answer. The working relationship between the FCA and the Assistance Board is as envisioned by the 1987 Act; these are two separate Federal agencies, each with specific powers spelled out by law. The FCA and the Assistance Board have signed one memorandum of understanding with the Treasury Department addressing use of the revolving fund. The FCA and the Assistance Board also have signed an agreement addressing the sharing of the FCA examination and supervisory documents with the Assistance Board to enable it to carry out its functions under the 1987 Act.

SYSTEM OPERATIONS

Question. How has the FCA viewed the System's loan restructuring activities this past year?

Answer. The FCA evaluates System restructuring efforts and performance during examination of System institutions. Loan restructuring throughout the System has been slow to significantly affect the total volume of nonperforming loans. Certain districts have done an admirable job of trying to restructure loans in ways that are economically sensible for both the lender and the borrower. However, this cannot be said of the System as a whole.

Question. Mr. Naylor, from your comments about overhead costs can we assume that you favor a streamlining of the credit delivery to producers?

Answer. Senator, I believe that efficiency in operations by the System, combined with borrower relations, will determine the viability of the System in the years to come.

FARM CREDIT SYSTEM'S 1987 REPORT

Question. Mr. Naylor, on page 4 of your statement you say, "Without the allowance for loan losses reversals, the System would have lost $1.485 billion." ($17 million was actually reported.) Is that a correct statement? Please explain.

Answer. The reference to losses of $1.485 is based on projections made by the System near the beginning of 1987. Therefore, the statement directs the subcommittee members' attention to the point that without the unexpected favorable conditions resulting in the 1987 reversals, a loss of this magnitude was expected by the System's own projections.

Question. You also state that net income in 1987 was $509 million. Did you mean to say that net interest income was $509 million?

Answer. Yes. The $509 million was net interest income for 1987.

Question. Mr. Naylor, you seem to imply that the FCA is skeptical of the System's financial reporting. Are not the System's financial reports audited? If the auditing firm did not concur with the appropriateness of the financials or the reversal, wouldn't they have so indicated in their audit report?

Answer. This question would appear to refer to the emphasis added to the word "reported" on page 2 of my statement. In retrospect I see little need to have added emphasis to the word "reported'. However, given the unusual step of reversing provisions to the allowance for loan losses, the very large amount and the timing of those reversals, and the fact that such action was taken by several banks which remain troubled, there remains room for caution. These are by their nature subjective determinations which the FCA will continue to evaluate during forthcoming examinations and take appropriate action where warranted. We would expect the System's external auditors to exercize the same scrutiny over these transactions, and we observe that they have issued their audit of the System's 1987 yearend data with a qualified opinion.

Question. Does the FCA consider this a safe and sound business practice? Are you considering any regulation changes in regard to loan loss allowances?

Answer. As mentioned before, the FCA will continue to evaluate the adequacy of loan loss allowances in its examinations and take appropriate actions in the future as it deems necessary. At this time, the agency does not anticipate any change in relevant regulations.

Question. Were the allowances for loan loss reversals distributed more or less uniformly across all districts, or were they concentrated in certain districts?

Answer. System reversals of provisions for losses were incurred mostly by Federal land banks in the Midwest, with one exception.

Question. What is the FCA's projection for System income (loss) for 1989? Will net interest income be positive or negative?

Answer. The Agency has not made new projections for future System income based on 1987 year ending data. We have made such projections at times in the past and we will continue to maintain an especially close watch on the financial condition of the weaker institutions of the System. Pending merger activity, mandatory and optional, make financial forecasting very difficult at this time.

JACKSON FEDERAL LAND BANK

Question. On December 8, 1987, the Jackson Federal Land Bank, acting according to regulation (#624.105 dealing with retirement of equities) ceased the retirement of borrower stock. What is the situation regarding Jackson Federal Land Bank stock today. Is it still frozen. If yes, why?

Answer. The Jackson FLB ceased retirement of borrower stock when its net worth, determined on a GAAP basis, reached zero. To the best of our knowledge the stock in Jackson is not being retired. The assistance provided by the Farm Credit System Assistance Board to the Jackson FLB was sufficient to allow the FLB continued access to the debt market with only a nominal cushion above its collateral requirements. We understand this is currently under deliberation between the Assistance Board and Jackson FLB.

Question. Realizing the Agricultural Credit Act of 1987 created the Farm Credit System Assistance Board to administer the basic assistance provisions, please give this committee the benefit of your understanding of what must take place and when it could take place in order for eligible Jackson Federal Land Bank stock to be redeemed at par value.

Answer. It is the FCA's understanding that the Jackson FLB must receive appropriate certification and financial assistance from the Assistance Board in such amounts above those necessary to maintain collateral coverage for its outstanding debt obligations. This additional financial assistance must be requested by the Jackson FLB and provided by the Assistance Board. To the best of our knowledge, this can be accomplished at any time.

CAPITAL

Question. Mr. Naylor, do you really think that the Farm Credit System can attract outside equity capital? Isn't it true that with the rate on System bonds, an outside investor will require an additional 5% as a return on that investment? If the System has to pay 13% to attract capital, isn't the System's only real alternative to generate capital through retained earnings?

Answer. The System's ability to attract outside capital is dependent upon the ability of its institutions to operate in a sound business-like manner. Because of weak earnings capability and capital position, some System institutions may not be able to pay an attractive return on invested capital without substantial changes in their structure and operating policies. Once these institutions return to profitability, they should be able to compete effectively in the capital markets to the extent that non-voting stock is marketable.

REGULATIONS

Question. We understand that the FCA will soon be issuing draft regulations on capital and mergers. When you make these available to Congress for review, will they be available to System institutions and borrowers as well?

Answer. Yes. The FCA Board is scheduled to consider proposed regulations on minimum permanent capital standards at its April 5 Board meeting. Proposed regulations on System structure will be considered at a later Board meeting. In accordance with the Farm Credit Act of 1971, as amended, the proposed regulations will be transmitted to the Senate and House Agriculture Committees for the required 30 day review period before being printed in the Federal Register for public comment. As public documents, these proposed regulations will be available to the public, including the System, upon request, after their adoption by the FCA Board.

QUESTIONS SUBMITTED BY SENATOR MCCLURE

Question. Idaho is included in the Twelfth Farm Credit District in Spokane, so I am naturally concerned about the condition of this district. Can you tell me briefly what you perceive the status of the Twelfth District to be since the Agricultural Credit Act of 1987 was adopted?

Answer. Based on the yearend financial report of the Twelfth Farm Credit District in Spokane, the district lost approximately $50 million for 1987 which was about what it lost in 1985. The district had lost approximately $225 million more in 1986. The reversal of the Third Quarter 1986 assessments required by the Agricultural Credit Act of 1987 improved the financial condition of the 12th District, but the district still reported to stockholders that it expects to continue to incur monthly operating losses through 1988.

Question. There is currently a great deal of activity within the Farm Credit System as efforts are being made to comply with the Agricultural Credit Act of 1987, and I have been hearing positive reports of the steps that are being taken to assist Farm Credit System borrowers and the System as a whole. What is the status of the regulations governing implementation of the Agricultural Credit Act of 1987 and when can we expect to have them fully implemented?

Answer. As we stated in response to the Chairman's question, the FCA is working diligently on regulations resulting from the 1987 Act. Seven proposed regulations will be considered by the FCA Board its April Board meeting. These will be transmitted to the Senate and House for a 30 day review period, after which they will be published in the Federal Register, with a 30 day public comment period. These comments will be analyzed and considered by the FCA Board in adopting final regulations, which will be printed in the Federal Register. In some cases the FCA Board may determine public hearings should be held. The statute further requires that the effective date of final FCA regulations does not occur until 30 Congressional days after the regulations are published.

In a few words, Senator, the regulations will be available for review and comment shortly, but they will not be in effect until the fall of 1988.

Question. In spite of reports from the System that steps are being taken to implement provisions of the Agricultural Credit Act, I continue to hear from borrowers that interest rates have not fallen, and in some cases have actually increased. With the understanding that a reduction in interest rates will take time, what is the current situation with respect to interest rates and when can farm borrowers expect to see a drop in their interest rates?

Answer. Interest rate decisions are the business responsibility of the Boards of Directors of Farm Credit System institutions. The regulator was removed from the interest rate adjustment process by the Farm Credit Act Amendments of 1986. Farmers should expect competitive interest rates at the present time in healthy System institutions and might expect interest rate improvement, depending on the decisions of district boards and management in unhealthy districts and possible Federal assistance to distressed institutions from the Farm Credit System Assistance Board.

Question. What progress has been made in writing down loans?

Answer. Once again, Senator, this is a business decision to be made by each institution. The borrower rights provisions of the Agricultural Act of 1987 give substantial protection to borrowers with regard to restructuring as opposed to foreclosure. In addition, each of the members of the FCA Board has spoken out publicly encouraging System institutions to restructure their loan portfolios.

Question. During debate on the Agricultural Credit Act, I was extremely concerned about the protection of borrower stock. The Agricultural Credit Act provides for a guarantee of existing borrower stock and allows for the return of frozen equity in liquidated PCA's. According to a recent Farm Credit System Assistance Board press release, eligible stockholders in six production credit associations in liquidation in the Omaha and Spokane Farm Credit Districts will receive cash or credit for stock which was frozen or retired at less than par. I am pleased to hear that farmers will have an opportunity to recover their investments. What criteria will be used to determine which borrowers are eligible?

Answer. The statute defines "eligible borrower stock" of liquidated PCAs as borrower stock that was frozen after January 1, 1983 by an institution that was placed in liquidation or stock that was retired at less than par value by an institution that was placed in liquidation after January 1, 1983, but before the date of enactment of the 1987 Act, which was January 6, 1988.

Question. One provision of the Agricultural Credit Act of 1987 that is critical to recovery of the Twelfth District, which includes Idaho, is the return of financial assistance that the Twelfth District provided to other Farm Credit districts during the Third Quarter of 1986. The Twelfth District made these payments with the understanding that they would be returned in early 1987. Instead, the Farm Credit System decided the funds could not be returned because it would cause other banks to default.

As a result of this provision of the Agricultural Credit Act of 1987 which reverses payments made by the Twelfth District to assist other System banks, approximately $96 million from capital loss sharing and the $41 million investment in the Farm Credit System Capital Corporation would be returned to the Twelfth District.

What is the status of the return of these Third Quarter payments to the Twelfth District, and how has this helped farm borrowers in the Twelfth District?

Answer. The Third Quarter assessments for 1986 were reversed by the Agricultural Act of 1987 and those funds now are in the banks where they originated. The reversal will improve the income statement of the contributing banks and therefore, improve the appearance of the district's financial condition.

Question. I am particularly interested in the secondary agricultural market or the Federal Agricultural Mortgage Corporation (FAMC) that was established under the Agricultural Credit Act of 1987. What progress has been made toward establishing "Farmer Mac" and when can farm borrowers expect to begin participating in this new credit arrangement?

Answer. The secondary market - Farmer Mac - begins with a nine member temporary board appointed by the White House. Once the temporary board is appointed, it will begin issuing $20 million in common stock in the corporation. Once that stock is purchased, a 15 member permanent board will be named. This process is expected to take about 18 months.

SUBCOMMITTEE RECESS

Senator BURDICK. This ends today's hearing. The next hearing will be held Wednesday, March 30, in this same room at 10 a.m. At that time we will be hearing from representatives of the Rural Electrification Administration. Until then, the subcommittee is in recess.

[Whereupon, at 11:50 a.m., Thursday, March 24, the subcommittee was recessed, to reconvene at 10 a.m., March 30.]

AGRICULTURE, RURAL DEVELOPMENT, AND RELATED AGENCIES APPROPRIATIONS FOR FISCAL YEAR 1989

WEDNESDAY, MARCH 30, 1988

U.S. SENATE,
SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS,
Washington, DC.

The subcommittee met at 10:08 a.m., in room SD–138, Dirksen Senate Office Building, Hon. Quentin N. Burdick (chairman) presiding.

Present: Senators Burdick, Sasser, and Grassley.

DEPARTMENT OF AGRICULTURE

RURAL ELECTRIFICATION ADMINISTRATION

STATEMENTS OF:

ROLAND R. VAUTOUR, UNDER SECRETARY FOR SMALL COMMUNITY AND RURAL DEVELOPMENT

HAROLD V. HUNTER, ADMINISTRATOR, RURAL ELECTRIFICATION ADMINISTRATION

ACCOMPANIED BY:

JACK VAN MARK, DEPUTY ADMINISTRATOR, RURAL ELECTRIFICATION ADMINISTRATION

STEPHEN B. DEWHURST, BUDGET OFFICER, DEPARTMENT OF AGRICULTURE.

OPENING REMARKS

Senator BURDICK. Good morning, ladies and gentlemen. Today, we continue with our hearings on the fiscal year 1989 budget for the Department of Agriculture. We will concentrate on the Rural Electrification Administration.

With us today are Roland Vautour, the Under Secretary for Small Community and Rural Development; Harold Hunter, the Administrator of the Rural Electrification Administration; Jack Van Mark, the Deputy Administrator; and Steve Dewhurst, the Budget Officer for the Department of Agriculture. Welcome to the committee, gentlemen.

The President's budget for REA proposes to eliminate all of the direct and guaranteed loans that we currently have available.

While it purports to replace this assistance by a scheme of private sector, federally guaranteed loans, there really would be nothing left of Rural Electrification if this budget were adopted.

Before I go any further, I would like to hear from the members of the administration who will support this budget request. I ask that you summarize your statements since they will be made a part of the record in full.

First, I will call on Mr. Roland Vautour.

STATEMENT OF ROLAND VAUTOUR

Mr. VAUTOUR. Good morning, Mr. Chairman. I appreciate this opportunity to appear before this subcommittee to present the fiscal year 1989 budget proposal for the Rural Electrification Administration.

I will attempt to quickly summarize the statement that I have submitted for the record.

This budget continues to meet the commitment of this administration to provide strong and reliable electric and telephone service to rural areas. The RE Act enacted by Congress in 1936 established a program to provide electricity to rural America. The original goal has basically been accomplished, with the benefits well known to everyone in rural America.

The original goal, in addition to providing service, was to provide capital at Treasury's borrowing rate of interest and to assure its availability. The cost of borrowing in the private credit market is now reasonable and there is adequate capital available for relatively secure loans.

REA borrowers have changed dramatically over the past 50 years and so have the areas that they serve. As a rule, they are well managed, progressive businesses, with some ranking as major business enterprises. A number of REA borrowers have assets greater than some of the 50 largest investor-owned utilities in the nation.

Many of the service areas of REA borrowers have changed; for instance, 53 borrowers are serving suburbs or such upscale areas as Washington, DC, Atlanta, GA, and Minneapolis-St. Paul. A review of the loans made from 1980 to 1985 indicates that nearly 20 percent of new loans went to these urbanized areas.

The REA telephone and Rural Telephone Bank programs are available to all telephone companies regardless of size or need. Twenty-five percent of all new telephone loans between 1980 and 1985 went to subsidiaries of large independent borrowers.

Everything we do must be accomplished within the fiscal restraints of the current budget deficit. For the 1989 fiscal year the REA budget proposes to convert the direct loan and loan guarantee program to a private sector financed program with partial REA guarantees.

The Rural Telephone Bank will continue to make direct loans. The proposal also considers the congressional intent of the original Rural Telephone Bank legislation and supports the movement of the bank to become a privately owned institution. The Rural Telephone Bank proposal is consistent with the original objective that the bank should conduct its operations on a self-sustaining basis.

The fiscal year 1989 budget proposes the sale of loan assets and the prepayment of direct loans at market value from the Rural Electrification and Telephone Revolving Fund. Penalty-free prepayment of guaranteed loans and Rural Telephone Bank loans would also be permitted.

We feel that the movement from insured and direct loans to the guaranteed private-sector loan program would minimally impact the average user. It is estimated that the impact at 5 years after the loan is made would amount to 74 cents per month for the average REA borrower's consumer.

Rural utilities, financed by REA, are continuing to improve their economic status and many compare favorably with investor-owned companies. The REA budget recognizes the program's accomplishments and continues to achieve the basic objectives of the existing act, with a redirection of direct loans to loan guarantees of private loans.

I would like at this point, Mr. Chairman, to turn the presentation over to Mr. Hunter for a summary of his statement and a detailed explanation of the REA budget proposal.

PREPARED STATEMENT

Senator BURDICK. Fine. We have your complete statement, Mr. Vautour, and it will be made part of the record.

[The statement follows:]

STATEMENT OF ROLAND R. VAUTOUR

Good morning, Mr. Chairman. I appreciate this opportunity to appear before this subcommittee to present the fiscal year 1989 budget proposal for the Rural Electrification Administration.

This budget continues to meet the commitment of this Administration to provide strong and reliable electric and telephone service to the rural area. At the same time, however, it assumes the responsibility of budgetary restraint. Many programs, once worthwhile, have served their purpose and should be modified so that future needs of the country can be met.

The RE Act enacted by Congress in 1936 established a program to provide electricity to rural America. Over 2,000 organizations were formed to accomplish that goal. In the beginning loans were made at the prevailing Treasury rate, and over the years $59 billion has been lent to REA borrowers. Telephone loans became available in 1949.

The original goal has basically been accomplished, with the benefits well known to everyone in rural America.

Given these facts, I believe it is important that we look at the program today in light of the original goals, the status of the participants, current fiscal restraints, and long-term goals.

The original goal, in addition to providing service, was to provide capital at Treasury's borrowing rate of interest and assure its availability. With inflation down, the cost of borrowing in the private credit market is now reasonable. The next issue then is availability. There is adequate capital available for relatively secure loans. The new REA loan guarantee program would provide a 70 percent guarantee of principal and interest for electric distribution loans and an 80 percent guarantee for power supply loans. Given the proficiency of the National Rural Utilities Cooperative Finance Corporation and the Bank for Cooperatives, we believe this addresses the availability issue.

A review of the status and profile of the borrowers reveals that they have not stood still over the years. REA borrowers have changed dramatically over the past 50 years and so have the areas they serve. As a rule they are well managed, progressive businesses, some ranking as major business entities. A number of REA borrowers have assets greater than some of the 50 largest investor-owned utilities in the Nation.

The areas they serve have also changed. Cow pastures have been incorporated into some of our major cities. Suburbs have engulfed major portions of some REA service areas. Fifty-three borrowers are serving suburbs of such up-scale areas as Washington, D.C.; Atlanta, Georgia; and Minneapolis-St. Paul, Minnesota; though once they had been rural, they are not now. Also, why should we as a Nation subsidize power and telephone rates for exclusive ski resorts and fashionable beaches when there are demands in poorer rural areas? The economic and service needs of many of the areas are no different than metropolitan areas in general. A review of new loans from 1980 to 1985 would indicate that nearly 20 percent of new loans went to these urbanized areas.

The REA telephone and RTB loan programs are available to all telephone companies regardless of size or need. Twenty-five percent of all new telephone loans between 1980 and 1985 went to subsidiaries of large independent borrowers.

Both electric and telephone borrowers serve areas of the country, principally recreational, that do not qualify as financially needy. This raises the issue of the necessity for subsidized power.

Everything we do must be accomplished within the fiscal restraints of the current budget deficit. Gramm-Rudman-Hollings and the Budget Summit of 1987 graphically brought that to our attention. It is incumbent on us to do our part while meeting the real needs in rural America. However, certain REA-related provisions of both the fiscal year 1988 Continuing Resolution and the Omnibus Budget Reconciliation Act of 1987 further expanded subsidies at a time when the Nation simply cannot afford it. As an example, creating a new cushion of credit grant program for rural development in the REA only duplicates existing programs and will eventually lead to more spending.

For the 1989 fiscal year, the REA budget proposes to convert the insured loan and loan guarantee program to a private sector financed program, with partial REA guarantees which I referenced earlier.

The Rural Telephone Bank will continue to make direct loans. The 1989 budget proposal provides $177 million annually in Bank loans. The proposal also considers the Congressional intent of the original RTB legislation and supports the movement of the Bank to become a privately owned institution. The RTB budget proposal is consistent with the original objective that the Bank should conduct its operations on a self-sustaining basis. However, to accomplish this objective, we are recommending changes in the interest rate computations contained in the Budget Reconciliation Act of 1987. The rollback of Rural Telephone Bank long-term interest rates from 7.2 to just over 5 percent and the prohibition on the Bank from accumulating reserves, will make the statutory requirement of privatization beginning in 1995 more difficult. We are also recommending repeal of the provisions enacted that expand spending on REA programs.

Additionally, the fiscal year 1989 budget proposes the sale of loan assets and the prepayment of direct loans at market value from the Rural Electrification and Telephone Revolving Fund. Penalty-free prepayment of guaranteed loans and Rural Telephone Bank loans would also be permitted.

These steps, if taken now, can be accomplished by moderate reforms to the existing lending programs. The increased cost to REA borrowers is minimal and the budget savings are substantial, permitting the program to meet its statutory long-term obligations to repay the $7.9 billion interest-free loan it borrowed from the U.S. Treasury in 1973 and another $4.2 billion in other Treasury debt. REA borrower customers will face limited increases in rates due to these reforms. It is estimated that the average customer's monthly bill would be increased by only 74 cents per month 5 years after the loans are made. REA electric borrowers will also be in a better position to serve their changing service areas and expand their economic horizons.

Rural utilities, financed by REA, are continuing to improve their economic status and many compare favorably with investor-owned companies. In the reform of its financial operations, REA continues the Federal role in assisting rural electric and telephone borrowers. The REA budget recognizes the program's accomplishments and continues to achieve basic objectives of the existing Act, with a redirection of direct loans to loan guarantees of private loans.

I would now like to turn over the presentation to the Administrator of REA, Harold Hunter.

STATEMENT OF HAROLD HUNTER

Senator BURDICK. Mr. Hunter.

Mr. HUNTER. Mr. Chairman, it is a pleasure to appear here again before this subcommittee to present the fiscal year 1989 budget.

The details, as has been mentioned, have been provided for the record, and I appreciate the opportunity to summarize the statement.

In some previous years, the administration has recommended that REA lending programs be phased out. The recommendations that this administration now makes to you is a major change from positions taken earlier. This 1989 budget reflects the budget crisis that exists in our federal government. Budget outlays and budget costs need to be reduced. However, this budget proposal would continue an undergirding for the necessary financing of the rural electric and rural telephone industries in which we take so much pride.

For many years, REA has made direct loans for electric distribution cooperatives at 5 percent. These loans require a matching loan of 30 percent from a nonfederal lender with a shared security, but with no guarantee.

In this budget, that 5 percent, 70–30 ratio loan program that we have been so familiar with is replaced by a program where 100 percent of the funding will come from a nonfederal lender. REA will guarantee 70 percent of the private-sector loan, leaving the remaining 30 percent without government backing identical to the current program.

Mr. Chairman, and members of the committee, today, this administration recommends to you a compromise program. This program is dramatically different from positions that previously have been offered.

REA 5 percent direct loans to telephone systems would also be converted to loans from nongovernment resources. REA would guarantee 70 percent of the principal and interest of those loans.

As evidence of credit worthiness in 1987, 29 rural electric systems and 21 rural telephone systems voluntarily paid off their insured loan balances of $727 million at a discount. These borrowers were able to become financially independent through private financing or through their own available funds. This program needs to be reauthorized in 1989.

The 1987 Omnibus Budget Reconciliation Act provides an interest rate setting formula for Rural Telephone Bank loans that would decrease the loan rate from 7.2 percent to 5 percent. We would amend this act so Rural Telephone Bank lending rates would be based on borrowing, operating, and administrative costs while following the congressional intent of the existing RTB statute that the bank should begin privatization starting in 1995.

This budget proposes steps necessary to achieve privatization of the Rural Telephone Bank by 1995, and to make certain that the revolving fund will not become insolvent and to ensure that the U.S. Treasury is repaid the $7.9 billion of interest-free loans it is owed by the fund.

REA-guaranteed loans for power generation have come from the Federal Financing Bank [FFB] of the U.S. Treasury in the past. This budget proposes a substitution to this drain upon the federal budget. Instead of the REA-guaranteed FFB loan, the administration proposes that REA guarantee 80 percent of the principal and interest of loans made by private sector banks.

REA and its borrowers will gain comfort from the discipline of loan evaluation that will be provided at the minimum 20 percent risk exposure of the private lender.

This budget proposes a financing program of $1,526,197,000 for REA in 1989.

REA borrowers have made dramatic financial gains in recent years. Rural electric and rural telephone records show that REA-financed systems are prosperous.

I have records on that that I would like to submit for the record if you would so allow me.

Senator BURDICK. They will be received.

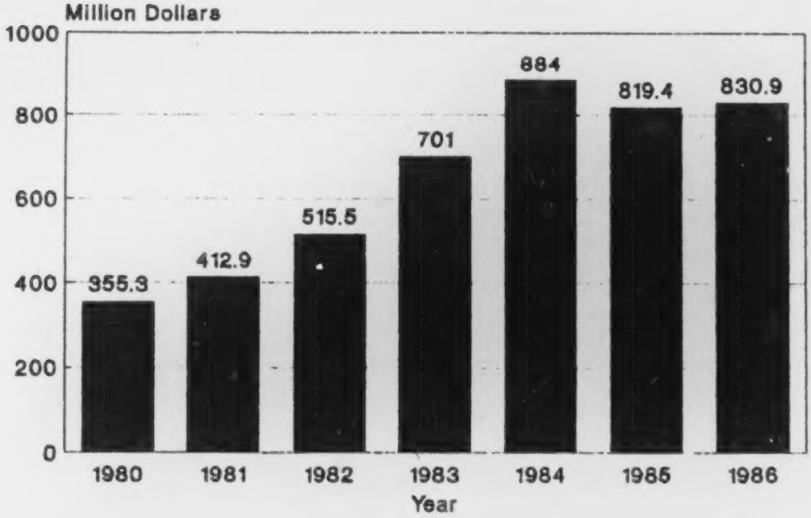
Mr. HUNTER. Thank you.

[The information follows:]

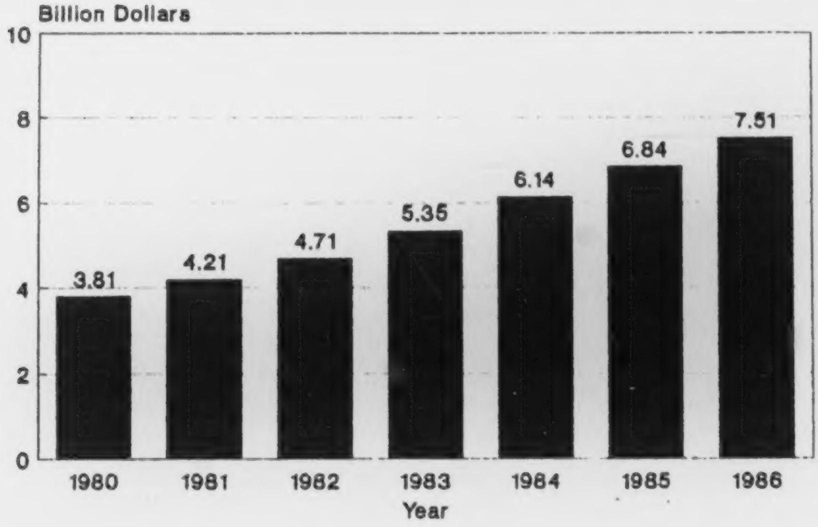
RURAL ELECTRIFICATION ADMINISTRATION

CHARTS SHOWING FINANCIAL GAINS

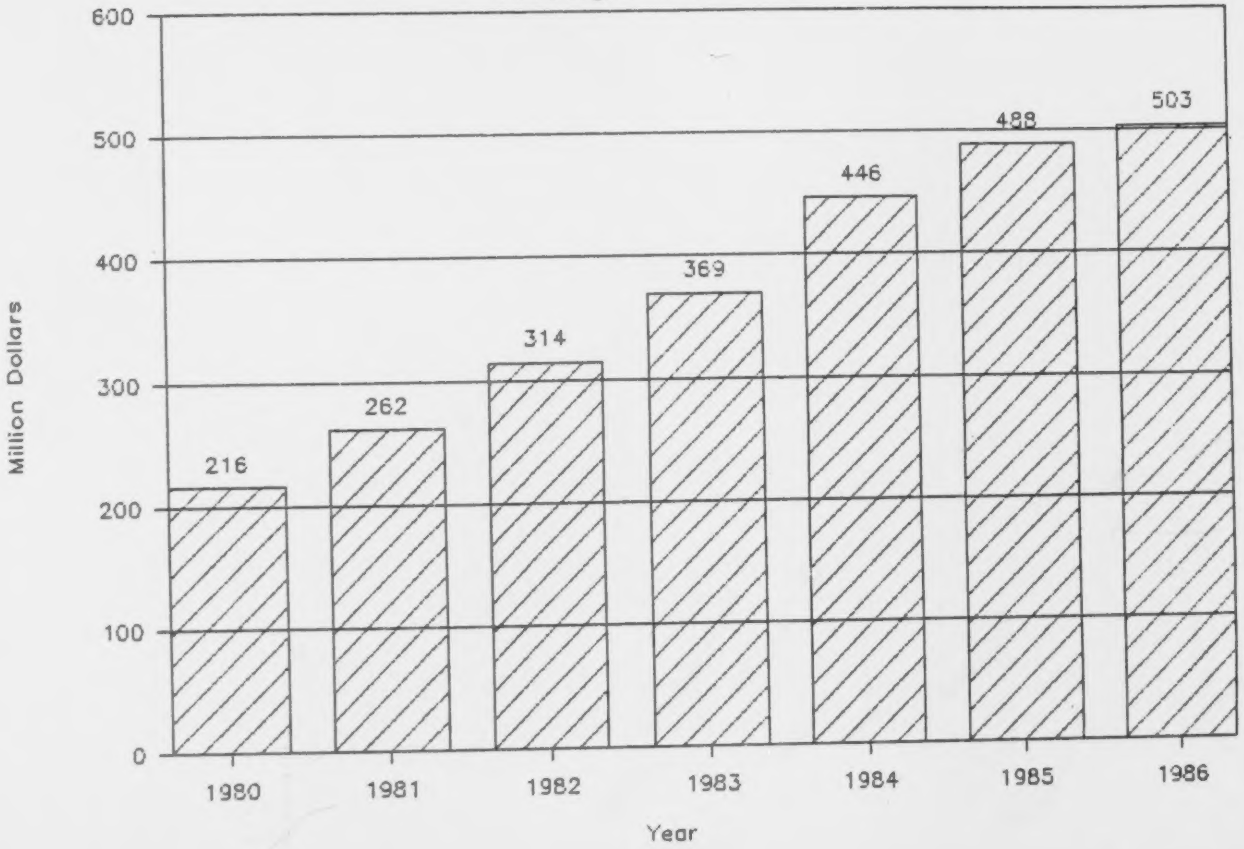
Net Margins of Distribution Borrowers
1980 - 1986



Equity of Distribution Borrowers
1980 - 1986

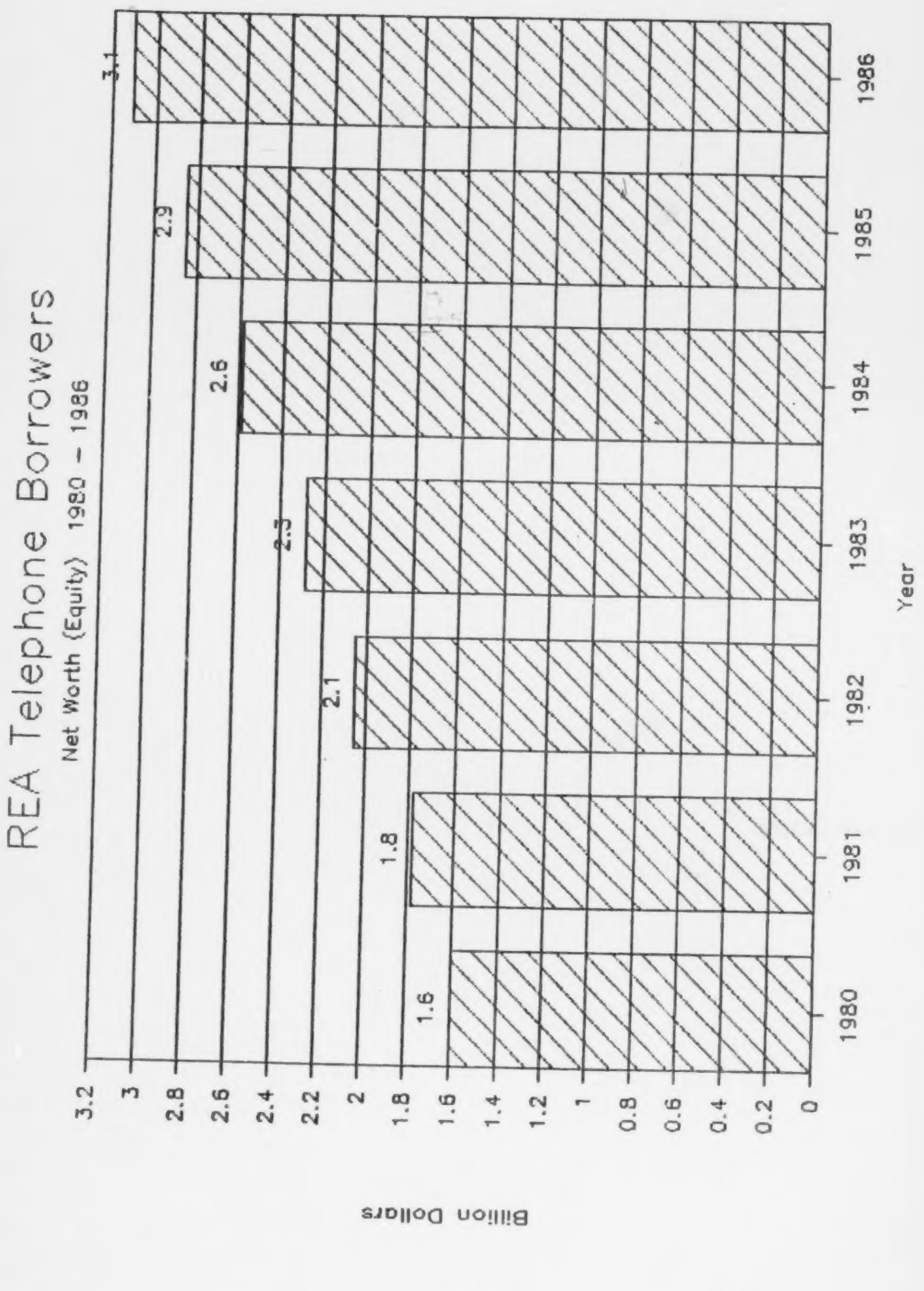


Footnote: Equity as a percent of assets has grown from 29.8 percent in 1980 to 35.8 percent in 1986.



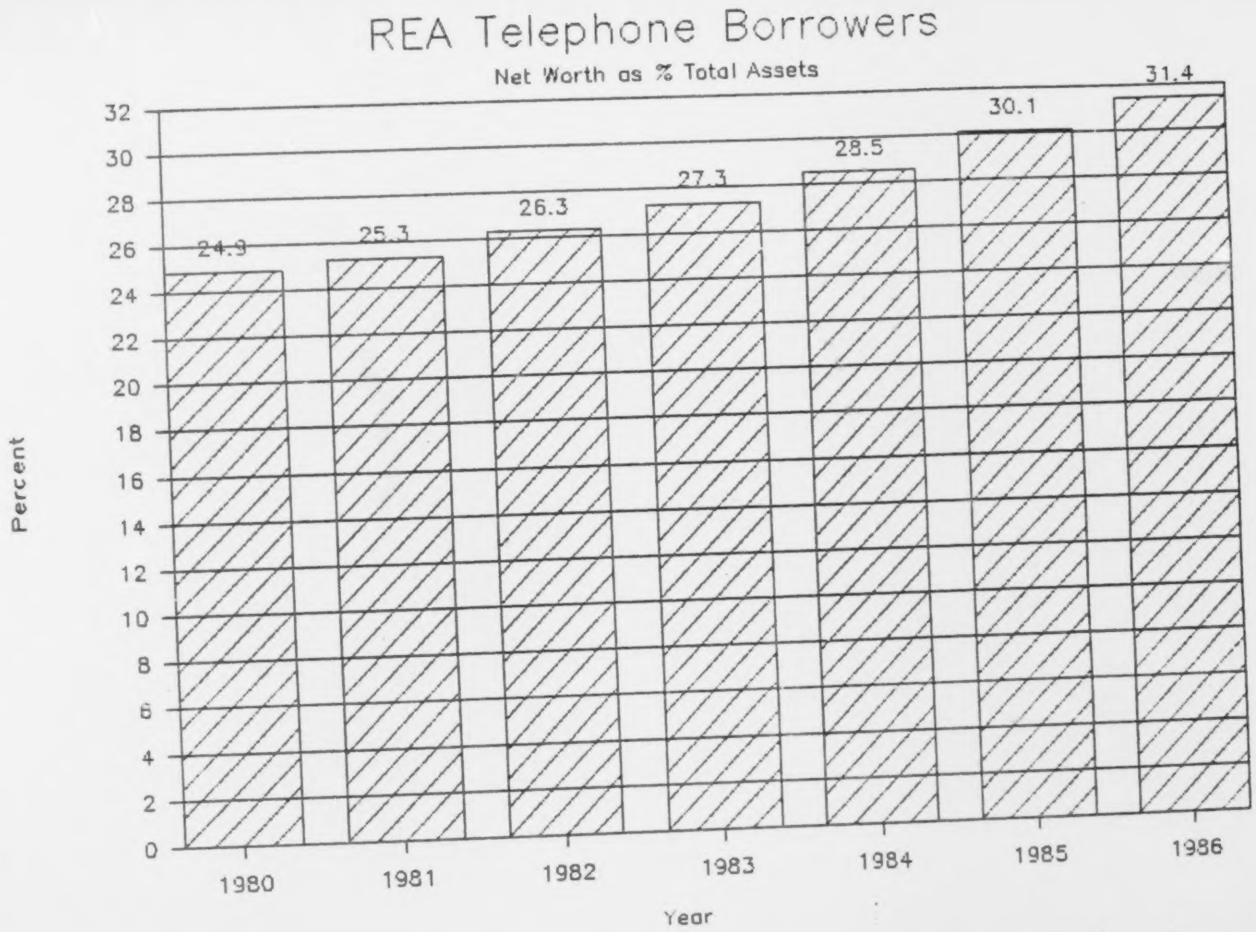
REA Telephone Borrowers

Net Margins 1980 – 1986



REA Telephone Borrowers

Net Worth (Equity) 1980 - 1986



REA Telephone Borrowers

Net Worth as % Total Assets

Mr. Hunter. The budget proposes that REA lending for the most prosperous rural electric and rural telephone systems be discontinued so that support of truly needed government services will not be denied.

Rural electric and rural telephone systems in cooperation with REA have achieved a great record. In the past half century, REA has loaned or guaranteed over $59 billion. Through the integrity and the diligence of REA borrowers, and with the help of REA as an agency, all loan repayments have been made, until recently, except for $44,000.

Electricity is available to over 98 percent of rural America; telephones serve over 96 percent.

REA borrowers have achieved their responsibility to become healthy, strong businesses. Only recently has REA and a few of its borrowers faced business reversals. Some REA-financed generation facilities are now without sufficient power markets and cannot find enough revenue. The REA troubled plant workout team, as it is called, is adjusting admirably to the need to work with these borrowers and with other creditors, and with the Department of Justice, and with Treasury in the search for solutions.

Through forbearance, firmness, innovation, and cooperation, workouts are being designed. Return of favorable market conditions and stronger revenue flows are expected to bring eventual repayments.

In summary, the 1989 budget proposal for REA is fiscally sound and it is responsible. It recognizes the financial strength of most REA borrowers and continues to meet the remaining needs of the rural areas. It also recognizes that the budget costs of the program cannot continue in view of the need to reduce the deficit while repaying Treasury debt.

The administration's proposal calls for the Rural Electrification Administration to continue to assist borrowers in maintaining quality electric and telephone service across the country and to deliver future programs within an acceptable framework of costs to the American taxpayer by using partial guarantees of private loans.

PREPARED STATEMENT AND ASSESSMENT INFORMATION

I am providing for the record our detailed assessment of the program and why the reforms are essential.

Mr. Chairman, that completes my remarks. I would be glad to answer any questions.

Senator Burdick. Thank you very much. The information and your complete statement will be made part of the record.

[The statement and assessment information follow:]

STATEMENT OF HAROLD V. HUNTER

Mr. Chairman and members of the Committee, it is a pleasure to appear before this subcommittee to present the fiscal year 1989 budget for the Rural Electrification Administration (REA). I would like to give you an overview of the work and accomplishments of the agency before I elaborate on the proposals included in the President's fiscal year 1989 budget.

The goal and objective established for REA was to assure that rural communities had access to reliable electric and telephone service. The original responsibility of the agency has been met. The agency has provided approximately $59 billion in long-term financing to over 2,100 rural electric and telephone borrowers, which in turn, have delivered electric and telephone service to virtually all unserved rural areas. The RE Act states that borrowers should be assisted to develop their resources to achieve the financial strength needed to satisfy their credit needs privately. Currently, most REA borrowers rely heavily on REA loans even though they are able to borrow from private sources.

Rural electric systems have become major businesses and operate and maintain half the Nation's electric poles and power lines to serve 11 percent of the country's population. Ninety-nine percent of all U.S. farms have electricity and approximately 96 percent have telephone service.

REA telephone borrowers provide telecommunication service to more than 4.8 million subscribers over 869,000 route miles of line. The percentage of subscribers receiving one-party service has increased by more than 31 percent over the last 6 years.

Borrowers' Economic Health

Financially, the rural electric and telephone industry is doing very well overall.

There are no telephone borrowers experiencing financial difficulties. The 1986 Statistical Report for rural telephone borrowers shows strides in all economic areas, including value of plant, operating revenues, general funds, and profits. There was a dramatic increase in the ratio of current assets to current liabilities--285 percent in 1985 to 364 percent in 1986 as reported by telephone borrowers. For each $1 of obligation coming due, there was $3.64 of cash, or assets that could be converted to cash, to pay those obligations. The average net income or margin per customer more than doubled in nominal terms from 1980 through 1986 or from $50.76 to $106.46. Net income, or margins, as a percent of total operating revenues was 12.1 percent in 1980. By the end of 1986, it had risen to 16.1 percent. Also, this year it is expected that long-distance telephone companies will lower their long-distance rates. This reduction should stimulate the number of long-distance calls placed and increase operating revenues and net income for REA borrowers.

In the rural electrification area, operating revenues for borrowers operating electric distribution systems increased by 48.1 percent from 1981 through 1986 while net margins have more than doubled. The current asset/liability ratio at the close of 1986 was 205 percent, jumping 17 percent over the previous year. Some electric power supply borrowers and affiliated distribution members have assets in the billions and are comparable to those of U.S. companies on the "Fortune 100" list as well as being larger than the Nation's 50 largest investor-owned utilities. In addition to annual operating revenues, energy sales of all electric borrowers continued to increase in 1986 and were greater than in any preceding year.

Further indications that rural electric and telephone systems are financially healthy is their ability to obtain private financing to prepay direct loans. In fiscal year 1987, 29 rural electric systems and 21 rural telephone systems paid off insured loan balances of approximately $727 million at a discount. They found this opportunity, which expired on September 30, 1987, as a means of improving their business and responding to a wider range of member and community needs. These borrowers were able to become financially independent through private financing or through their available funds. This program needs to be re-authorized in fiscal year 1989 to permit borrowers to graduate from Government assistance as intended in the original RE Act and as many are interested in doing.

Rural Telephone Bank borrowers, who are contractually obliged to pay a prepayment premium, paid approximately $19.7 million in principal and $1.4 million in prepayment premiums. The borrowers were able to repay their loans with internally generated funds or with funds borrowed at favorable interest rates from private lenders. Most REA borrowers are generating substantial cash flow and can borrow privately to meet investment needs.

FY 1989 Budget Proposals

Loan Programs

For fiscal year 1989, the proposed REA budget continues to provide loan assistance by guaranteeing privately originated loans. For the electric program the proposal includes $1.2 billion in partial REA guarantees of private-sector loans. Electric distribution loans of $1 billion would be guaranteed at 70 percent of principal and interest and power supply loans of $200 million would be guaranteed at 80 percent of principal and interest. The proposed budget also includes $100 million in privately financed telephone loans with a 70 percent guarantee. The Rural Telephone Bank (RTB) proposes to continue making loans at the $177 million level and to take other necessary steps to achieve privatization in 1995. These reforms are necessary to reduce government spending, to make certain that the revolving fund will not become insolvent, and to insure that the U.S. Treasury is repaid the $7.9 billion interest-free loan.

This Administration and the Congress have a responsibility to the American taxpayer to seek ways to diminish the significant fiscal impact that many programs have on the Nation's budget deficit. Federal credit programs, which include REA are very costly and changes are needed to reduce the costs and to begin to repay the REA revolving fund debt to the U.S. Treasury. These costs are borne by the taxpayer. For example, a 5 percent interest loan given today costs the taxpayer 40 cents for each and every loan dollar. Most REA borrowers are exempt from Federal income tax and have preferential rights to federally subsidized hydro power. They receive free loan processing services and free technical advice from REA. All of these benefits together involve a very high budget cost that the Nation's taxpayers can no longer afford. REA borrowers have the financial strength to obtain private financing in most cases without a Federal guarantee. It has been acknowledged that the ability to borrow is more important than the interest rate. In general, inflation is down and interest rates are reasonable. In the current healthy economic climate, private lenders to financially healthy REA borrowers need not depend on--nor expect--a 100 percent guarantee by the Federal government. The substitution of the insured loan and loan guarantee programs with programs that provide a partial REA guarantee of privately originated loans is a step toward accomplishing needed REA budget reform. The impact of these reforms on the customers of REA borrowers will be minimal. For example, a typical electric distribution borrower who obtains a 70 percent REA guarantee of a privately originated loan versus a 5 percent REA direct loan will only have to charge an average customer an additional 74 cents per month 5 years after receiving the loan.

Salaries and Expenses

The fiscal year 1989 budget proposal requests an appropriation of $22,137,000 for Salaries and Expenses, with a reimbursement of $6,613,000 from the Rural Telephone Bank for its share of administrative support. In fiscal year 1987, the RTB paid only $111,000 of this expense. Since the RTB was created in 1971, the services of REA employees and the Office of General Counsel have been provided without charge; and the Bank paid only for incidental administrative expenses. This change is needed to privatize the RTB as intended in the original statute. The Bank will need a competent staff to begin to compete as a private entity in 1995 and the costs of the staff should be borne by the Bank. The total for Salaries and Expenses of $28,750,000 includes appropriated funds and the reimbursement from the RTB.

Included in the request is $715,000 to expand and update the agency's automated data processing capability that will enhance the ability of the REA staff to process loans and provide management data on a timely basis.

The budget request provides for a staffing level of 500. This level reflects a projected reduction of 50 staff years as the loan program moves from federally provided credit to a private-sector program guaranteed by REA. In addition, improvements in productivity are possible with expanding computer capabilities and streamlined procedures for loan processing.

Reimbursement to the Revolving Fund

No appropriation to reimburse the revolving fund for interest subsidies is requested. The budget includes necessary reforms to prevent insolvency of the fund, to stabilize the fund and enable it to repay its debt including the $7.9 billion interest-free loan made by Treasury in 1973.

Purchase of Rural Telephone Bank Stock

REA is not requesting funds for the purchase of additional 2 percent dividend Class A stock of the Rural Telephone Bank. Many of the Bank's borrowers are some of the most profitable utilities in the Nation and they do not require more taxpayer subsidies. Furthermore, the Bank does not require additional capitalization. An appropriation of $29 million in fiscal year 1988 brought the current capital holdings of the Federal government to over $506 million. The capital provided to the Bank earns only 2 percent interest annually and consequently it is subsidized by the Treasury since its borrowing costs are far higher (currently 8.5 percent). Treasury has had to borrow from the public to pay for $200 million in interest subsidies given just for the Class A Stock purchased since 1973. Refraining from additional appropriations through 1991, when the current authorization expires, would save the Treasury about $13 million in interest expense alone over the next 3 years.

Proposed Legislation

For fiscal year 1989, legislation will be submitted to provide partial guarantees of private-sector loans, the sale of REA loan assets at market value, the premium-free prepayment of outstanding REA-FFB loans with an 80 percent REA guarantee. Premium-free prepayment of RTB loans and the voluntary repayment of direct loans at present value is also proposed provided that the borrowers who prepay become ineligible for any type of REA assistance in the future. Also, borrowers able to raise funds in the normal marketplace without Government assistance such as those serving urban, suburban, and exclusive resort areas, and subsidiaries of major telephone holding companies will not qualify for an REA loan. We now have many electric borrowers serving predominantly urban/suburban areas. Clearly these are not the rural areas intended to get loan assistance at Treasury borrowing rates when the REA was first established. Such borrowers accounted for nearly 20 percent of all new electric loans from 1980 through 1985. There are 75 telephone borrowers that are subsidiaries of large prosperous independent telephone companies such as CONTEL and ALLTEL. These borrowers accounted for 25 percent of all new telephone loans from 1980 through 1985. A number of borrowers have obtained loans to provide service in areas that are predominantly used for recreation purposes such as ski and beach resorts.

Prepayments

The FFB premium-free prepayment program has been extremely popular with REA power supply borrowers but is very costly. These prepayments have resulted in losses due the Treasury of about $620 million. The FFB prepayment program proposed by USDA is for fiscal year 1989 only and is a balanced program designed to let FFB borrowers refinance existing loans with an 80 percent REA guaranteed privately originated loan without paying the contractually required premium. In this way, borrowers benefit by saving interest costs. Budget costs are reduced by reliance on partial REA guarantees. Existing 100 percent REA guaranteed FFB direct loans would be phased out at the end of 1988 and a new program of an 80 percent REA guarantee of private loans for power generation would be available starting in 1989. At current interest rates, 24 power supply borrowers could achieve over $50 million in annual interest savings on nearly $5 billion in long-term FFB debt currently outstanding.

The fiscal year 1989 budget proposes reinstitution of the fiscal year 1987 prepayment authorities for REA direct loans. Borrowers with existing loans would be permitted to prepay at a discount if they graduate to private-sector lending in the future. It is estimated that $250 million will be prepaid in fiscal year 1989. The budget proposal also provides permanent authority for borrowers to prepay outstanding RTB loans without a prepayment premium if they no longer return to REA or the RTB for further assistance.

During fiscal year 1987, some borrowers prepaid their insured loans because they wanted to free themselves from government restrictions or to diversify into other business endeavors. Others no longer needed to rely on subsidized credit.

Loan Asset Sales

The budget request also includes $1.6 billion in loan asset sales from the revolving fund. The receipts from the sales will be used to repay Treasury borrowing and to reduce future interest expense to the fund. No asset sales are proposed for the Rural Telephone Bank.

Changes to the Omnibus Budget Reconciliation Act

The 1987 Omnibus Budget Reconciliation Act provides in section 1411(c) an interest rate setting formula to calculate the Bank's loan interest rate for all future loans. This has the effect of rolling back the RTB long-term interest rate from 7.2 percent to about 5 percent and is not justified. We therefore propose to amend section 1411(c), the determination of interest rates on Rural Telephone Bank loans with language that will institute an interest rate formula so that future Bank lending rates are based on borrowing, operating and administrative costs while following the Congressional intent of the existing RTB statute that the Bank should begin privatization starting in 1995.

We are requesting the repeal of the Section 1412 interest rate provision contained in the Omnibus Budget Reconciliation Act of 1987. This rate based on the Treasury cost of borrowing would be used to determine an applicant's eligibility for a Rural Telephone Bank loan. This provision has the effect of moving telephone borrowers from the RTB to the revolving fund.

We also propose to repeal section 1413 regarding the establishment of a reserve for Bank losses due to interest rate fluctuations and the disallowance of any other reserves. This provision also does not establish the necessary equity reserves for privatization in 1995. The RTB cannot privatize in 1995 if it does not accumulate adequate reserves. These reserves, exclusive of Class A Stock purchased by Treasury must equal 5 percent to 8 percent of total Bank assets on a market value basis--otherwise private borrowing in 1995 will not be feasible. Also, the RTB must have sufficient income in 1995 to be financially worthy of private credit market scrutiny. Sections 1411(c), 1412, and 1413 must be amended and repealed to achieve privatization of the RTB.

We also propose repeal of Section 1403 regarding the Cushion of Credit Payment program, which is intended to fund a new rural development grant program. The Department of Agriculture has proposed a viable rural development initiative of grant and loan programs to be administered by the Farmers Home Administration. The Cushion of Credit program duplicates this initiative.

We also propose repeal of Section 1402 regarding Use of Funds. This has the effect of allowing REA borrowers to use electric and telephone loan subsidies up to 15 percent of plant assets to invest in projects not intended in the RE Act. This will encourage borrowers to invest in risky projects that could result in substantial losses impairing their ability to repay REA loans. It will also increase borrower pressure for more 5 percent interest REA loans at a time when spending reductions are necessary to reduce the deficit.

Summary

The 1989 budget proposal for REA is fiscally sound and responsible. It recognizes the financial strength of most REA borrowers and continues to meet the remaining needs of the rural areas. It also recognizes that the budget costs of the program cannot continue in view of the need to reduce the deficit while repaying Treasury debt. The Administration's proposal calls for the Rural Electrification Administration to continue to assist borrowers in maintaining quality electric and telephone service across the country and deliver future programs within an acceptable framework of costs to the American taxpayer by using partial guarantees of private loans. I am providing for the record our detailed assessment of the program and why reforms are essential.

DETAILED ASSESSMENT OF RURAL ELECTRIFICATION ADMINISTRATION PROGRAM TO ASSIST BORROWERS IN MAINTAINING QUALITY ELECTRIC AND TELEPHONE SERVICE

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TAB I

Summary -- Why Reforms Are Needed

Program History and Current Status

The Rural Electrification Administration (REA) was established at the height of the Great Depression* to provide loans at Treasury interest rates to rural borrowers for the purpose of providing electrical service. At that time, only 12 percent of rural farms had electric service. Lending was expanded to include telephone service in 1949 when only 36 percent of farms had telephone service and, in 1973, a new lending assistance program was authorized for electric power generation. Currently, REA has over $34 billion in outstanding loans to just under 2,000 electric and telephone borrowers. Its electric borrowers provide 11 percent of the total electricity sold in the U.S. and its telephone borrowers serve over 4 percent of total U.S. access lines. New originations of subsidized loans, which total almost $2 billion in 1988, are provided through three separate programs as follows:

- o 5 percent loans to electric distribution and telephone borrowers;
- o 100 percent REA guaranteed Federal Financing Bank (FFB) direct loans at Treasury interest rates to electric power generation borrowers; and
- o Direct loans that will have long-term rates of about 5 percent interest from the Rural Telephone Bank (RTB) to telephone borrowers.

The Program Has Accomplished Its Goals

The original purpose of the RE Act has long been achieved. In 1964, 98.1 percent of all farms were receiving electricity. In the last 24 years, however, only minimal advances have been made in further electrification, as the percentage of serviced farms rose only to 98.8 percent. Similarly, since 1976, the percent of farms with telephone service has risen from 92.0 percent to 96.0 percent.

Yet electric and telephone borrowers are not achieving a key element of Congressionally mandated policy to satisfy their credit needs from their own financial organizations and other sources. REA borrowers continue to secure the majority of their new financing from REA or with an REA guarantee. This is despite the fact that most all REA borrowers are financially sound and are quite capable and able to borrow from private financial institutions. As a group, electric distribution and telephone borrowers reported in excess of $1.3 billion in profit margins in 1985 -- double the level of 1980. A number of REA power supply borrowers have well-established private sector borrowing credentials including solid debt service ratings by Moody's and Standard and Poors. In fact, some REA power supply and distribution borrowers have grown to be larger than some of the companies on Fortune's 100 largest list as well as the 50 largest private Investor Owned Utilities.

Since 1973 REA borrowers have benefited from over $50 billion in life-of-loan economic subsidies including $18 billion of direct Federal costs. This subsidy represents in excess of $3,200 for every customer served by an REA borrower. Many of these subsidies have been used for projects that are inconsistent with the original purposes of the Act. For example, a siginficant portion of these loans were used to provide electric distribution and telephone service in largely urban and suburban areas (e.g., suburbs of Washington D.C., Atlanta, and Minneapolis) and are going to subsidiaries of large telephone holding companies (e.g., CONTEL Corp. and [illegible] Corp.). Such borrowers account for only 6.7 percent of all borrowers yet received 21.4 percent (or nearly $1.6 billion) of REA lending over 1980-1985. Both electric and telephone loans have also been used to provide service to exclusive recreation areas (e.g., Vail, Aspen, Hilton Head Island, and Kiawah Island).

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*REA was established in 1935 as part of a general program of unemployment relief -- it was not until 1936 that REA began to make loans.

Now Is The Time For Program Reforms

There is a national consensus that the deficit must be reduced and the budget balanced. The Gramm-Rudman-Hollings (G-R-H) statute requires that this be achieved by 1993. For FY 1989, a deficit of less than $146 billion is projected as a result of the Budget Agreement reached in December 1987. To meet future deficit targets, additional reductions will be necessary.

REA will thus be under considerable pressure because REA program goals have already been accomplished. This will occur at a time when the REA Revolving Fund will face insolvency and a statutory obligation to begin the repayment of a $7.9 billion interest free loan made to the Revolving Fund by Treasury in 1993. The Congressional Budget Office projects the Fund to become insolvent in the 1990s primarily because of the sharply mounting costs of deeply subsidized 2 percent and 5 percent loans. Projected outlay increases in the REA program forecasts an unavoidable head-on collision with both deficit reduction and Revolving Fund insolvency. Without reforms, CBO says the Fund would require direct appropriations to continue operations.

The Administration's Reform Proposal

The Administration's reform proposal for REA would make available a new and less costly program of REA partial guarantees (70 percent for distribution and telephone, 80 percent for power supply) of privately originated loans. Further, the Rural Telephone Bank (RTB) would be privatized in 1995.

The Administration also proposes incentives for borrowers to graduate to private credit and to cease assistance to well-to-do borrowers who are urban/suburban/recreational or are subsidiaries of major holding companies.

This approach will: (1) assure lending assistance and private credit for most current REA borrowers, (2) substantially reduce Federal Budget outlays ($2.3 billion in FY 1989 and $6.8 billion in FY 1990 through FY 1993 1/), (3) prevent the projected insolvency of the REA Revolving Fund, and (4) meet the goals of the RE Act of having borrowers satisfy their credit needs from their own financial organizations and other sources. Such a transition will occur with a virtually unnoticable impact on the customers of REA's borrowers. For example, for a typical electric distribution customer, one could expect that in five years his monthly bill would increase by only about 0.7 percent or by only 74 cents per month.

TAB II A

Administration Proposed Reforms

Starting in FY 1989, direct 5 percent loan and loan guarantee borrowers will rely on partial (70 percent or 80 percent) REA guarantees of private loans. Further, the Rural Telephone Bank (RTB) will be privatized in 1995. The Administration also proposes incentives for borrowers to graduate to private credit and to discontinue loan guarantee assistance to borrowers serving areas that are no longer rural or that use assistance for predominately recreational purposes.

For Electric Power Supply Borrowers:

- A new program of an 80 percent REA guarantee of private loans for power generation would be available starting in 1989. Loan guarantee

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1/ These savings include offsetting collections from proposed assets sales and prepayments. For purposes of reducing the G-R-H excess deficit, savings amount to $0.3 billion in FY 1989 and $4.8 billion from FY 1990 through FY 1993.

authority of $200 million annually is requested for this program. The REA 100 percent guaranteed FFB direct loan program is replaced after 1988 by this new program.

- REA borrowers with outstanding FFB loans would be permitted to prepay their loans at par (without paying the contracted premium) with an 80 percent REA guarantee of a private loan. This will permit borrowers to take advantage of current low interest rates. It is estimated that $1 billion in loans will be prepaid in 1989. Borrowers could prepay nearly $5 billion in FFB loans with 80 percent REA guarantees and save more than $50 million annually in interest.

For Electric Distribution and Telephone Borrowers:

- A new program of 70 percent REA guarantees of private loans would be available in 1989. Loan guarantee authority of $1,119 million is requested in 1989. The 5 percent direct loans ($861 million in 1988) would be replaced at the end of 1988 with the new program.
- Loans to borrowers serving urban/suburban and recreation areas as well as subsidiaries of major telecommunications holding companies would be discontinued.
- Borrowers with existing loans would be permitted to prepay at a discount if they graduate to private sector lending in the future.

Privatization of the Rural Telephone Bank (RTB) in 1995:

- The RTB would continue to make direct loans subject to an annual limitation of $177 million.
- The RTB would accumulate at least $30 million annually in reserves to repurchase Class A stock in 1995 (Treasury receives a 2 percent annual return on this stock).
- The RTB would set interest rates at levels sufficient to cover borrowing costs and administrative expenses and take other necessary steps to achieve the statutory requirement of privatization in 1995.

Budget Outlay Savings are Projected at $2.3 billion in Fiscal Year 1989

TAB III A

The Administration Proposed Partial Loan Guarantee Will Not Require REA Borrowers to Raise Rates Significantly

- Nearly all electric distribution borrowers of 5 percent interest direct loans currently borrow from REA 70 percent of their total borrowing requirement. The Administration proposes to have borrowers rely instead on a 70 percent REA guarantee of private sector loan of principal and interest. At current market interest rates, a 70 percent guarantee is expected to result in a loan interest rate of about 9.5 percent or nearly twice the 5 percent rate.
- On average, electric distribution borrowers' interest expense on all outstanding long-term debt is about 5 percent of total operating revenue. Therefore, since interest on debt is a relatively small part of the total cost, a higher interest rate will not increase consumer rates substantially. The cost of purchased power accounts for the bulk of -- around 70 percent -- the total cost of providing electric service.
- If a typical borrower obtained a 70 percent REA guarantee of a 30-year privately originated loan instead of its current 5 percent REA direct loan with a 30 percent supplemental financing loan from the CFC, five

years later, the borrower's total annual interest costs would require only about a 0.7 percent increase in the monthly bill to its average customer or an increase of only 74 cents per month.

TAB III B

Nearly All REA Borrowers Can Secure Loans From Private Lenders at Reasonable Rates With Partial REA Guarantees

o Many REA borrowers have obtained private loans without any REA guarantee. Currently, REA electric borrowers' non-guaranteed private debt exceeds $8.6 billion.

o A number of REA borrowers have well-established private sector borrowing credentials including solid debt service ratings by Standard and Poors and Moody's (see TABLE III B-1).

o Electric borrowers have for years borrowed from the National Rural Utilities Cooperative Finance Corporation (CFC) that began lending in 1971 and currently has lent over $3.4 billion to REA borrowers. The CFC is well capitalized and routinely borrows in private capital markets relying on Shearson-Lehman-Hutton as investment banker and others as needed. They have also established Bank Lines of Credit and Revolving Credit Agreements with over 70 banks.

o With the proposed 80 percent guarantee for Power Supply borrowers, securing private sector loans should not be a problem for nearly all borrowers.

TABLE III B-1
Private Financing Experience and Recent Debt Ratings of Selected REA Power Supply Borrowers

Borrower ID	Borrower Name	Long-term FFB Debt ($ in M)	Private Debt Without REA Guarantee ($ in M)	Total Outstanding Debt 1/ ($ in M)	Private Debt as Percent of Total Debt	Primary Sources of Private Debt 2/	Recent Debt Rating 3/
OH99	Buckeye Po. Inc.	56.8	313.0	414.7	75.5	BC,IDB's,Mrtg Bonds,PCB	Aa3(M)/AA(S)
CO46	Colorado-Ute Elec. Ass.	399.1	662.9	1,191.0	55.7	CFC,PCB	A1(M)/A(S)
FL41	Seminole Elec. Coop.	578.4	578.4	1,075.6	53.8	CFC,NCSC Col Bank,PCB	A1(M)/A(S)
IN106	Hoosier Elec. Coop.	400.5	400.5	874.2	45.8	BC,Irving Trust,PCB	A(M)
ND45	Basin Elec. Po. Coop.	1055.1	915.8	2,442.5	37.5	BC,PCB	A1(M)/A(S)
IA83	Cent. Iowa Po. Coop.	62.5	77.6	219.4	35.4	CFC,PCB	NA
GA109	Oglethorpe Po. Corp.	2734.9	1,491.4	4,246.9	35.1	Col Bank,Citibank,PCB	A1(M)/P1(S)
MO73	Associated Elec. Coop.	623.8	354.2	1,069.3	33.1	CFC	A2(M)
KY59	East Kentucky Po. Coop.	501.8	284.5	909.0	31.3	CFC,Insurance Cos,PCB	NA
KS53	Sunflower Elec. Coop.	411.8	144.3	591.5	24.4	BC,PCB	NA
NM18	Plains Elec. G&T Coop.	370.1	93.0	489.0	19.0	PCB	NA
KS54	Kansas Elec. Po. Coop.	194.5	43.5	238.0	18.3	PCB	NA
TX155	San Miguel Elec. Coop.	375.4	78.2	453.6	17.2	PCB	NA
IA84	Corn Belt Po. Coop.	52.4	22.4	130.4	17.2	CFC,PCB	4A-2(D)
OR42	Pacific N.W. Generating Co.	53.7	9.7	63.5	15.3	PCB	NA
CO47	Tri-State G&T Ass.	556.2	106.4	739.7	14.4	PCB	A3&Baa(M)
NC67	N.C. Elec. Memb. Corp.	1187.7	197.5	1,393.6	14.2	Duke Power, PCB	NA
AR34	Arkansas Elec. Coop.	350.8	60.4	447.9	13.5	PCB	A1(M)/P1(S)
AL42	Alabama Elec. Coop.	271.42	48.8	400.0	12.2	CFC	NA
MS53	So. Miss. Elec. Po. Ass.	607.2	89.1	758.1	11.8	BC,PCB	NA
MN107	United Po. Ass.	534.4	84.0	722.2	11.6	PCB	NA
SC51	Saluda River Elec. Coop.	418.8	51.9	470.7	11.0	Duke Power,PCB	NA
MN106	Coop. Po. Ass.	564	73.4	713.5	10.3	CFC,PCB	NA

OK32	West. Farmers Elec. Coop.	452.6	59.9	600.3	10.0	CFC,Wichita Bank	NA
PA27	Allegheny Elec. Coop.	498.1	30.8	529.3	5.8	CFC,PCB	Aaa(M)
TOTAL		13,312.0	6,271.6	21,183.9	29.6		

1/ Includes REA debt, REA guaranteed FFB debt, REA guaranteed private debt, and non-REA guaranteed private debt.

2/ BC (Bank for Cooperatives), CFC (Cooperative Finance Corporation), and PCB (pollution control bonds).

3/ M (Moody's), S (Standard and Poors), and D (Dunn and Bradstreet). NA indicates either not applicable or not available.

TAB III C

Many Power Supply Borrowers Can Achieve Significant Benefits From Prepayment of REA Guaranteed FFB Loans

- o As an incentive program under the Administration's FY 1989 Budget proposal, REA borrowers with outstanding FFB loans would be permitted to prepay their loans at par (without paying the contracted premium) with an 80 percent REA guarantee of a private loan.
- o It is assumed that power supply borrowers could currently receive private refinancing loans with an 80 percent REA guarantee at 9.75 percent*.
- o It is estimated that, in total, 24 borrowers could achieve over $50 million in annual interest savings on nearly $5 billion in long-term FFB debt outstanding (see TABLE III C-1).
- o In present value terms, these savings would be worth about $500 million to the borrowers.

*Long-term Treasury rates are currently around 8.5 percent and it is estimated that with an 80 percent guarantee, private lenders will require an additional 12.5 basis points.

TABLE III C-1

JB2017BE USDA/RURAL ELECTRIFICATION ADMINISTRATION
FFB LONG TERM PRINCIPAL BALANCES OUTSTANDING
FOR INTEREST RATES >= 9.76% AS OF 3/ 2/88

OBS	ST	BOR	PRINCIPAL BALANCE	CURRENT ANNUAL INT COST	INTEREST COST AT 9.75%	DIFF IN COLS 2 AND 3	PREMIUM AT 8.50%
1	AL	42	123,621,483	13,087,285	12,053,095	1,034,191	26,502,644
2	AK	8	104,763,327	13,269,108	10,214,424	3,054,683	44,525,268
3	AR	34	122,810,832	13,470,806	11,974,056	1,496,750	31,815,339
4	CO	46	25,726,903	3,028,883	2,508,373	520,510	7,779,135
5	CO	47	211,022,717	22,571,395	20,574,715	1,996,680	46,598,053
6	FL	41	329,090,346	34,934,175	32,086,309	2,847,866	74,807,606
7	GA	109	728,055,001	76,344,013	70,985,363	5,358,651	155,977,617
8	IL	50	52,970,538	6,201,088	5,164,627	1,036,461	15,910,235
9	IN	106	203,332,101	23,988,971	19,824,888	4,164,083	67,971,825
10	IN	107	138,746,601	15,283,783	13,527,794	1,755,990	36,240,730
11	KS	53	145,118,999	15,762,395	14,149,102	1,613,292	35,775,947
12	KY	59	345,228,035	36,634,914	33,659,733	2,975,181	75,912,505
13	MN	106	69,823,608	7,679,636	6,729,802	949,834	17,932,010
14	MN	107	160,531,723	17,677,651	15,651,794	2,025,857	40,087,673
15	MS	53	409,812,260	44,493,809	39,956,695	4,537,114	97,536,575
16	MO	73	455,165,323	47,535,940	44,378,619	3,157,321	87,561,989
17	NM	4	48,302,000	5,227,204	4,709,445	517,759	12,011,408
18	NM	10	224,051,977	24,189,542	21,845,068	2,344,474	54,182,598
19	ND	45	189,867,308	19,860,152	18,512,063	1,348,089	38,402,476
20	OH	99	34,456,357	4,057,153	3,359,495	697,658	11,412,547
21	OK	32	240,875,905	28,396,630	23,485,401	4,911,229	75,078,892
22	SC	51	217,081,589	23,635,186	21,165,455	2,469,731	54,385,063
23	TX	121	90,672,446	9,888,328	8,840,563	1,047,764	23,102,368
24	TX	155	294,264,782	31,355,989	28,690,816	2,665,173	63,464,029
			=============	===========	===========	==========	=============
			4,964,591,741	538,574,034	484,047,695	54,526,340	1,196,374,614

TAB IV A

The RE Act's Purpose of Providing Electric and Telephone Service to Rural Areas Has Been Accomplished; the Goal of Borrowers Relying on Private Credit Has Not

- In 1987, 99 percent of the farms have adequate electrical service and 96 percent have adequate telephone service.

- The RE Act has been successful in providing electric and telephone service to rural areas but borrowers still depend on REA contrary to the Act's legislative history and stated policy.

The Act's policy that borrowers should satisfy their credit needs privately is not being accomplished.

- Electric and telephone borrowers are not achieving a key element of Congressionally mandated policy to satisfy their credit needs from their own financial organizations and other sources (not REA). REA borrowers continue to secure the majority of their borrowed capital under the authorities of the RE Act.

TAB IV B

G-R-H Deficit Reduction and Projected Revolving Fund Insolvency Requires Lending Program Reform

- Nationally, there is a consensus that the Nation's deficit must be reduced and the budget balanced. The Gramm-Rudman-Hollings (G-R-H) statute requires this to be achieved by 1993 and for FY 1989 the Budget Agreement reached between the President and Congress is projected to result in a deficit of less than $146 billion.

- The Budget Agreement also -- for the first time -- structures the budget into several categories -- including defense, mandatory such as social security, and discretionary. REA programs are in the discretionary category.

- For FY 1989, the G-R-H deficit target is $136 billion. This reduction will require cuts in the discretionary category. In FY 1990, the deficit ceiling is $100 billion and it will require further major reductions.

- REA spending will be under considerable pressure because REA program goals are accomplished. This will occur at a time when the REA Revolving Fund is projected to become insolvent in the 90s because of sharply mounting costs of the deeply subsidized 2 percent and 5 percent loans, and because a very small number of borrowers have not paid their loan payments as required under their loan agreements with REA and the FFB.

- The projected outlay increases for the REA program is going to have a head on collision with deficit reduction and revolving fund insolvency. As shown below, Administration-proposed reforms in terms of outlay savings will prevent insolvency and support G-R-H while assuring REA borrowers access to credit.

REA REVOLVING FUND OUTLAYS
Savings From Current Services and Countable Savings for G-R-H Purposes
(in millions of dollars)

	1988	1989	1990	1991	1992	1993
CURRENT SERVICES REVOLVING FUND OUTLAYS........	(1,030)	987	1,004	1,087	1,110	1,139
ADMINISTRATION'S BUDGET REVOLVING FUND OUTLAYS.	(1,030)	(1,310)	(300)	(452)	(755)	(938)
SAVINGS FROM CURRENT SERVICES................	0	2,297	1,305	1,539	1,865	2,077
ASSET SALES AND PREPAYMENTS (NET):						
Asset Sales (net of debt service)............	0	927	526	389	405	410
Prepayments (net)............................	1,999	1,104	95	60	63	63
ASSET SALES AND PREPAYMENTS (NET)............	1,999	2,031	621	449	469	473
COUNTABLE PROPOSED SAVINGS FOR G-R-H PURPOSES..	(1,999)	266	684	1,090	1,396	1,604

TAB IV C

REA Borrowers Have Received Over $50 Billion in Life-of-Loan Economic Subsidies -- $3,200 for Every Customer -- Including $18 Billion of Direct Federal Costs Since 1973

- o REA Financed electric and telephone utilities and their consumers and subscribers have benefited from large Federal subsidies over the years.
    - -- It is estimated that the direct loans made by REA and the RTB since 1973 have resulted in Federal costs of around $18 billion. This is the difference between the Government's cost of money and the interest rate actually charged on loans to borrowers on a life-of-loan basis.
    - -- On the basis of what borrowers would have had to pay if they received their loans in the private financial markets versus what they are actually paying the Government, the life-of-loan economic subsidies on loans since 1973 amounts to over $50 billion.
- o Other subsidies not included above:
    - -- Most REA electric borrowers are exempt from Federal tax on income, unlike investor-owned electric and telephone utilities.
    - -- A number of REA borrowers with new power generating plants were able to take advantage of Safe Harbor leasing taxbreaks receiving over $1 billion in tax benefits even though prior to this, they were tax-exempt.
    - -- A number of borrowers are given first right of access to low-cost electricity produced from Federally-owned power projects.
    - -- Eight power supply borrowers have been allowed to prepay nearly $2.6 billion in FFB loans without premium resulting in losses of over $600 million.

TAB IV D

Nearly All REA Borrowers Are Financially Healthy and Profitable

Nearly all electric and telephone borrowers are financially sound and qualify for private loans. Most have borrowed from private lenders and have the financial credentials to secure loans from private lenders to meet future needs.

Electric

- o As of December 31, 1986, REA electric distribution borrowers, on a composite basis, had an equity to total asset ratio of 35.8 percent and annual margins compared to interest costs on outstanding debt was over 2.3 times. These levels compare very favorably to investor-owned electric companies in the industry such as the Virginia Electric and Power Company (VEPCO), which had an equity ratio of 39.6 percent and an after-tax TIER of 2.40 as of December 31, 1986. In addition, electric distribution borrowers have total assets exceeding $20 billion or an average of over $20 million per borrower.

- In 1986, all REA electric distribution borrowers combined had net margins of $830.8 million using conservative REA accounting standards. This is more than double their 1981 margins is 33.5 percent more than the $622.1 million authorization for 5 percent loans included in the 1988 Continuing Resolution enacted by Congress.

Telephone

- In 1986, REA telephone borrowers, on a composite basis, have an equity to total asset ratio of 31.4 percent and annual revenues compared to interest costs on outstanding debt of over 2.56 times. These levels are comparable to electric program borrowers and are considered to be more than adequate to attract private financing.
- In 1986, all telephone borrowers had net margins of $514.5 million. This was more than twice as much as the Congress authorization for new 5 percent loans in FY 1988. These total net margins exceed the same year's net income of the four Chesapeake and Potomac Telephone Companies combined which have approximately a million more access lines.

TAB IV E

Some REA Electric Borrowers' Power Supply and Affiliated Distribution Members' Assets Exceed Those of U.S. Companies on Fortune's 100 Largest U.S. Company List As Well As the Nation's 50 Largest Investor-Owned Utilities

- Shown below are selected REA borrowers, their total assets, compared to selected companies on the "Fortune 100" largest companies list and the Nation's 50 largest investor-owned utilities:

($ in billions)

REA Borrower	Total Assets
Oglethorpe Power Corp.	$6.1
Basin Electric Power Coop.	$3.1
North Carolina Electric Corp.	$2.2
Seminole Electric Coop.	$2.1

Selected "Fortune 100" Largest Companies	Total Assets	Rank on "Fortune 100" Largest List (By Revenues)
Lockheed	$5.9	30th
Georgia Pacific	$5.1	50th
Emerson Electric	$3.8	73rd
Texas Instruments	$3.3	72nd
Martin Marietta	$2.5	77th
Whirlpool	$2.2	93rd

Selected Top 50 Investor Owned Utilities	Total Assets	Rank on Top 50 List (By Revenues
Cleveland Electric	$5.6	38th
Baltimore Gas and Electric	$4.2	24th
Pacific Power and Light	$3.8	43rd
San Diego Gas and Electric	$3.2	22nd
PEPCO	$3.0	35th
Boston Edison	$2.3	40th
New England Power	$2.2	48th

TAB IV F

Some REA Telephone Borrowers Are Subsidiaries of Large Profitable Telephone Holding Companies

A number of REA borrowers are subsidiaries of major multi-billion and multi-million dollar telecommunications holding companies with gross revenues in excess of $100 million annually.

- There are 75 subsidiary borrowers, represented by 5 major holding companies, representing 7.5 percent of all telephone borrowers but accounted for 25.5 percent (or $658.6 million) of all REA telephone loan approvals (direct, RTB, and REA guaranteed) between 1980 and 1985 (see Tables IV F-1 and IV F-2). These borrowers also accounted for 26.5 percent (or $231.3 million) of RTB loan approvals and 78.5 percent (or $297.3 million) of loan guarantee approvals between 1980 and 1985 for all telephone borrowers.

- All of the telecommunications holding companies have established themselves as strong borrowers in private credit markets and rely on private credit markets to meet the majority of their debt needs.

- Subsidiaries of CONTEL Corporation and ALLTEL Corporation have been the largest borrowers from REA between 1980 and 1985 (over $400 million combined). Both of these holding companies are very large and well established in private credit markets. CONTEL's annual sales and assets were $2.6 billion and $5.1 billion respectively in 1985 and they had borrowers more than $1.4 billion in private credit markets. ALLTEL's annual sales and assets were $0.7 billion and $1.6 billion respectively in 1985 and they had borrowed more than $300 million in private credit markets (see TABLE IV-F-3).

TABLE IV F-1

MAJOR 1/ TELEPHONE HOLDING COMPANIES AND THEIR SUBSIDIARIES WHO HAVE RECEIVED LOAN APPROVALS FROM REA OVER 1980-1985

Holding Company	Total 1985 Sales ($ in M)	Number of Subsidiary Borrowers Receiving Loans 1980-1985	Percent of All REA Telephone Borrowers	Loan Approvals to Subsidiary Borrowers 1980-1985 ($ in M)	Total Loar Approvals t All Telephc Borrowers 1980-1985
CONTEL Corp.	$2,556.6	13	1.3%	$241.6	9.3%
ALLTEL Corp.	$ 672.0	18	1.8%	$172.9	6.7%
Telephone and Data Systems Inc.	$ 119.1	25	2.5%	$ 98.0	3.8%
Pacific Telecom Inc.	$ 459.0	7	.7%	$ 91.5	3.5%
Century Telephone Enterprises	$ 135.1	12	1.2%	$ 54.6	2.1%
TOTAL		75	7.5%	$658.6	25.5%

1/ Defined as having gross revenues in excess of $100 million.

TABLE IV F-2

Subsidiaries of Major Telephone Holding Companies Who Have Received Loan Approvals From REA Over 1980-1985

	Borrower ID	Borrower Name	Holding Company	Total Loans ($ in M)	Cumulative Loans ($ in M)
1	[illegible]	[illegible]	ALLTEL	3.1	3.1
2	AL550	Leeds	ALLTEL	6.9	10.0
3	AR523	White River	ALLTEL	2.1	12.1
4	FL509	ALLTEL Flordia	ALLTEL	28.9	41.0
5	GA554	ALLTEL Georgia	ALLTEL	11.0	52.0
6	MI536	ALLTEL Michigan	ALLTEL	13.9	65.9
7	MI557	Morenci Home	ALLTEL	2.7	68.6
8	MO583	ALLTEL Missouri	ALLTEL	4.7	73.3
9	NC510	ALLTEL Carolina	ALLTEL	47.1	120.4
10	NC545	Sandhill	ALLTEL	3.1	123.5
11	OK559	ALLTEL Oklahoma	ALLTEL	2.6	126.1
12	PA528	Murraysville	ALLTEL	10.0	136.1
13	PA529	Huntingdon	ALLTEL	1.4	137.5
14	PA531	Enon Valley	ALLTEL	6.2	143.7
15	SC505	ALLTEL SC	ALLTEL	7.5	151.2
16	TX618	ALLTEL Texas	ALLTEL	2.2	153.4
17	WV517	West Virginia	ALLTEL	13.1	166.5
18	WV522	Mountain State	ALLTEL	6.3	172.8
19	AZ505	CONTEL of the West	CONTEL	41.7	214.5
20	AR519	CONTEL of Arkansas	CONTEL	10.5	225.0
21	GA555	CONTEL of the South	CONTEL	37.9	262.9
22	IA556	CONTEL of Iowa	CONTEL	17.2	280.1
23	KS522	Kansas State	CONTEL	5.6	285.7
24	KS554	CONTEL of Kansas	CONTEL	20.4	306.1
25	KY526	CONTEL of Kentucky	CONTEL	12.8	318.9
26	ME511	CONTEL of Maine	CONTEL	5.0	323.9
27	MN526	CONTEL of Minnesota	CONTEL	1.0	324.9
28	MO580	CONTEL of Missouri	CONTEL	56.3	381.2
29	NC544	CONTEL of NC	CONTEL	18.9	400.1
30	ND535	North Dakota	CONTEL	8.0	408.1
31	WV518	West Virginia	CONTEL	6.3	414.4
32	AR545	Redfield	Century	2.3	416.7
33	ID516	Century of Idaho	Century	5.7	422.4
34	LA511	Coastal	Century	8.0	430.4
35	LA522	Century Tel. Co.	Century	2.4	432.8
36	LA526	United	Century	4.1	436.9
37	LA530	Louisiana Western	Century	5.7	442.6
38	MI561	Au Gres	Century	2.4	445.0
39	MS505	Home	Century	5.4	450.4
40	MO603	Holway	Century	1.1	451.5
41	MO604	Webster County	Century	5.0	456.5
42	TN514	Adamsville	Century	4.8	461.3
43	TN517	Claiborne	Century	7.9	469.2
44	AK512	Glacier State	PacTelecom	27.4	496.6
45	AK519	Sitka	PacTelecom	18.9	515.5
46	CO504	Eagle	PacTelecom	4.5	520.0
47	ID506	Gem State	PacTelecom	1.8	521.8
48	OR520	East Oregon	PacTelecom	33.2	555.0
49	WA540	Home	PacTelecom	5.6	560.6
50	WY518	Medicine P	PacTeleco	0.2	560.
51	AL501	Peoples	TelDataSy	5.9	566.
52	ID511	Troy	TelDataSy	0.6	567.
53	IN561	Home	TelDataSy	2.5	569.
54	IN563	Ind. Comm. Corp.	TelDataSy	5.5	575.
55	ME518	Hartland	TelDataSy	3.1	578.
56	ME524	Somerset	TelDataSy	8.6	586.
57	ME529	Warren	TelDataSy	1.0	587.
58	MI554	Augusta	TelDataSy	1.9	589.
59	MN600	Mid-State	TelDataSy	3.7	593.
60	MS504	Calhoun City	TelDataSy	2.3	595.
61	NH504	Kearsarge	TelDataSy	3.8	599.
62	OK563	Oklahoma	TelDataSy	16.7	616.
63	OR540	Home	TelDataSy	0.9	617.
64	PA545	Sugar Valley	TelDataSy	1.3	618.
65	SC508	Williston	TelDataSy	1.7	620.
66	SC525	St. Stephen	TelDataSy	1.8	621.
67	TN510	Tennessee	TelDataSy	25.7	647.
68	VT504	Perkinsville	TelDataSy	0.3	647.
69	VT505	Northfield	TelDataSy	1.6	649.
70	VT507	Ludlow	TelDataSy	3.0	652.
71	WA539	Asotin	TelDataSy	2.1	654.
72	WI578	Rock River	TelDataSy	1.0	655.
73	WI579	Mosel	TelDataSy	1.1	656.
74	WI584	Scandinavia	TelDataSy	1.0	657.
75	WI609	Stockbridge	TelDataSy	0.8	658.

TABLE IV F-3

Descriptions of Major Telephone Holding Companies Whose Subsidiaries Have Received Loan Approvals From REA Over 1980-1985

Holding Company	Description of Company	Financial Status
CONTEL Corp.	A major integrated telecommunications firm with telephone operations and business/information systems. Telephone operations consist of 30 telephone companies serving more than 2 million customers in 30 states and the Caribbean.	Annual sales and assets were $2.6B and $5.1B respectively in 1985. Of $1.8B in outstanding long-term debt, more than 78% was generated from non-REA private sector sources. Possible merger with Communications Satellite Corp.
ALLTEL Corp.	A major integrated telecommunications firm with telephone subsidiaries in 19 mid-western, eastern and southern states providing service to nearly 1 million customers. Also branching into cellular telephone and wide-area paging.	Annual sales and assets were $672.0M and $1.6B respectively in 1985. Of $613.5M in outstanding long-term debt, 50% was generated from non-REA private sector sources. The company has a $125M private revolving credit agreement through August 1989.
Telephone and Data Systems Inc.	A major integrated holding company with 60 independent operating companies serving 200,000 customers in 22 primary eastern states. Expanding into cellular telephone and radio paging.	Annual sales and assets were $119.1M and $406.4M respectively in 1985. Of $198.3M in outstanding long-term debt, nearly 32% was generated from non-REA private sector sources.
Pacific Telecom Inc.	A major holding company whose subsidiary operating companies serve 164,600 customers in 9 nortwestern states and 195 communities.	Annual sales and assets were $459.4M and $1.2B respectively in 1985. Of $428.1M in outstanding long-term debt, more than 78% has been generated from non-REA private sector sources. The company has a revolving line of private credit permitting loans up to $180M.
Century Telephone Enterprises	A major holding comapny with 29 telephone subsidiaries serving 224,000 customers in 11 mid-western and southern states.	Annual sales and assets were $135.1M and $433.4M respectively in 1985. Of $207.7M in outstanding long-term debt, more than 85% has been generated from non-REA private sector sources.

TAB IV G

About 5 Percent of the Borrowers Serve Largely Metropolitan Areas, Not Rural Areas, and Get Almost 20 Percent of Total REA Electric Loans

Borrowers Serving Urban/Suburban Areas

Under proposed Administration legislation, any electric distribution borrower or telephone borrower serving more than 20,000 customers and with more than 50 percent of these customers residing within an MSA or CMSA or greater than 100,000 population would be defined as an urban/suburban borrower. Such borrowers would be ineligible for any future partial REA loan guarantees of privately originated loans. A review of such borrowers disclosed:

- There are 53 electric distribution borrowers each serving more than 20,000 customers with more than 50 percent of these customers living in a metropolitan area. Between 1980 and 1985 these borrowers accounted for 18.4 percent (or $872.5 million) of their REA loan approvals (direct and REA guaranteed) between 1980 and 1985 (see Table IV G-1).

- These borrowers serve customers with household incomes in the middle/upper range in rapidly growing urban and suburban areas of cities such as Washington, D.C.; Minneapolis, Minnesota; Atlanta, Georgia; Anchorage, Alaska; Baton Rouge, Louisiana; Oklahoma City, Oklahoma; and Nashville, Tennessee (see TABLE IV G-2).

- These borrowers tend to serve cities and large towns some with population in excess of 20,000 population (see TABLE IV G-2).

- This clearly is inconsistent with the RE Act's provision of requiring that REA provide loan assistance to rural areas (towns, boroughs, etc.) with a population of 1,500 or less.

TABLE IV G-1

Urban/Suburban Electric Borrowers Who Have Received Loan Approvals From REA Over 1980-1985

	Borrower ID	Borrower Name	MSA or CMSA Location	Percent MSA or CMSA	Customers . (1985)	Loans (80-85) ($ in M)	Cumulative Loans ($ in M)
1	AK8	Chugach	Anchorage	99.40	58434	115.8	115.8
2	AL26	Baldwin County	Mobile	95.91	22510	4.6	120.4
3	AR10	First Electric	Little Rock	54.96	40333	10.1	130.5
4	AR24	Ozarks	Fayetteville	61.65	31618	7.0	137.4
5	CO16	Intermountain	Denver	60.69	41782	21.4	158.9
6	FL14	Clay	Jacksonville	68.52	83767	15.4	174.2
7	FL25	Lee County	Ft.Myers	80.40	91113	42.4	216.6
8	FL29	Talquin	Tallahassee	82.84	29338	19.5	236.1
9	FL33	Withlacoochee River	Tampa	85.55	93946	38.0	274.1
10	GA103	Coweta-Fayette	Atlanta	97.67	23050	11.4	285.5
11	GA35	Walton	Atlanta	95.36	45246	12.1	297.6
12	GA37	Douglas County	Atlanta	97.20	37434	7.6	305.2
13	GA51	Snapping Shoals	Atlanta	98.94	27015	4.4	309.6
14	GA77	Sawnee	Atlanta	85.76	31799	18.1	327.8
15	GA83	Jackson	Athens	65.37	61765	43.2	371.0
16	GA84	Cobb	Atlanta	97.00	67768	33.6	404.6
17	IN60	Morgan County	Indianapolis	58.31	20578	2.5	407.1
18	KY37	Owen County	Cincinnati	50.53	23241	6.4	413.5
19	LA10	Wash. St. Tammany	New Orleans	51.01	26126	19.9	433.4
20	LA13	Dixie	Baton Rouge	76.35	50985	40.5	473.9
21	LA9	South Louisiana	Lafayette	51.85	76009	38.9	512.8
22	MD4	Southern Maryland	Washington	64.83	72651	18.6	531.4
23	MN1	East Central	Minneapolis	57.45	23780	3.5	534.9
24	MN48	Anoka	Minneapolis	99.89	53730	10.3	545.2
25	MN62	Wright-Hennepin	Minneapolis	99.91	20673	4.7	549.9
26	MN65	Dakota	Minneapolis	99.70	39504	13.1	563.0
27	MS28	Coast	Biloxi	72.09	33869	10.9	573.9
28	MS39	Singing River	Pascagoula	73.08	39761	7.1	581.0
29	NC25	Rutherford	Charlotte	66.95	36283	4.2	585.2
30	NC35	Davidson	Greensboro	86.24	24106	8.6	593.7
31	NC39	Union	Charlotte	75.71	21460	3.4	597.1
32	NC43	Jones-Onslow	Jacksonville	61.75	33179	4.9	602.0
33	NC68	Crescent	Greensboro	55.52	29767	4.4	606.4
34	OH65	South Central	Columbus	56.46	52978	12.9	619.3
35	OK10	Oklahoma	Oklahoma City	78.11	26340	15.7	635.0
36	OK25	Verdigris Valley	Tulsa	61.95	20647	14.5	649.6
37	SC14	Aiken	Augusta	67.88	23166	8.3	657.9
38	SC19	Laurens	Greenville	51.60	21724	3.4	661.3
39	SC25	Berkeley	Charleston	100.00	39972	25.9	687.2
40	SC37	Mid-Carolina	Columbia	89.10	27171	6.7	693.9
41	SC36	Blue Ridge	Greenville	54.78	33341	13.3	707.2
42	TN19	Middle Tennessee	Nashville	90.12	64038	4.2	711.5
43	TN24	Cumberland	Nashville	90.05	48104	3.6	715.1
44	TN35	Sequachee Valley	Chattanooga	58.52	22318	3.9	718.9
45	TN36	Appalachian	Knoxville	71.44	26104	3.4	722.3
46	TX101	Tri-County	Dallas	72.43	25149	11.4	733.7
47	TX48	Magic Valley	McAllen	90.62	29158	22.9	756.7
48	TX56	South Plains	Lubbock	79.54	22523	14.9	771.6
49	TX76	Pedernales	Austin	66.12	71231	47.2	818.7
50	TX77	Johnson County	Dallas	66.17	22686	20.9	839.6
51	TX94	Guadalupe Valley	San Antonio	54.14	26071	13.4	853.0
52	VA55	Northern Virginia	Washington	92.82	45299	8.3	861.3
53	WA18	Inland Power	Spokane	64.14	21554	11.2	872.5

TABLE IV G-1
Urban/Suburban Telephone Borrowers Who Have Received Loan Approvals From REA Over 1980-1985

	Borrower ID	Borrower Name	MSA or CMSA Location	Holding Company?	Percent MSA or CMSA	Subscribers (1985)	Loans (80-85) ($ in M)	Cumulative Loans ($ in M)
1	GA554	ALLTEL Georgia	Athens	ALLTEL	61.68	21073	11.0	11.0
2	MI536	ALLTEL Michigan	Jackson	ALLTEL	65.50	35342	13.9	24.9
3	NC510	ALLTEL Carolina	Charlotte	ALLTEL	62.94	75781	47.1	72.0
4	PA528	Murraysville	Pittsburgh	ALLTEL	100.00	20300	10.0	82.0
5	PA551	Commonwealth	Scranton	no	68.08	145474	35.7	117.7

TABLE IV G- 2

Examples of Urban/Suburban Electric Distribution Borrowers

Borrower (MSA/CMSA)	Number Customers	% of Customers in MSA/CMSA	Largest Towns Served and Estimated % Served	Service Territory Per Capita Income as a % of State Per Capita Income	Reasons for Growth
Alaska 8 Chugach (Anchorage)	58,434	99.48%	Anchorage 229,800 (40-60%)	109%	Growth due to borrower serving Anchorage and surrounding territory.
Georgia 84 Cobb Electric (Atlanta)	64,358	97.00%	Roswell 23,337 (5%) East Marietta 11,900 (25%)	126%	Over the last decade more than 45% of all new housing in the state were in Atlanta and surrounding suburbs; residential growth has been 123% over the last decade.
Louisiana 13 Dixie Electric (Baton Rouge)	50,985	76.35%	Baton Rouge 248,600 (20-40%) Baker 12,865 (10-30%)	93%	Growth primarily due to population expansion in East Baton Rouge County; residential population has expanded by 100% over the last decade.
Maryland 4 Southern Maryland (Washington, D.C.)	72,651	64.83%	St. Charles 13,921 (100%) Lexington Park 10,361 (100%) Waldorf 9,782 (100%)	107%	Outward movement of population from Washington, D.C., has caused a shift from a primarily agricultural-oriented economy to one which is commuter-oriented; residential growth has been 50% over the last decade.
Minnesota 65 Dakota (Minneapolis)	39,504	99.70%	Burnsville 39,700 (30-50%) Apple Valley 21,818 (80-100%) Eagan 20,700 (80-100%)	132%	Most significant growth has been in the residential sector and has occurred in the suburban portions of the residential service area which borders the Twin Cities metropolitan area.
Oklahoma 10 Oklahoma Electric (Oklahoma City)	26,340	78.11%	Norman 77,300 (20-40%) Moore 41,500 (10-20%) Chickasha 17,400 (5-15%)	98%	Growth due to population expansion of Oklahoma City. Former rural parts of service area have been sold for home sites, apartment complexes, and commercial ventures. Residential growth has been 87% over the last decade.
South Carolina 25 Berkeley (Charleston)	39,972	100.00%	Goose Creek 17,811 (50%)	92%	Outgrowth from Charleston, S.C., has resulted in new housing developments, shopping centers, etc. Also, growth from Kiawah and Seabrook Island--both exclusive resort areas.
Tennessee 19 Middle Tennessee (Nashville)	64,838	90.12%	Franklin 13,416 (100%) Brentwood 9,608 (50%) Smyrna 9,442 (100%)	129%	Growth due primarily to its service territory located in the middle of state's principal areas of economic growth in and around Nashville. Residential growth of 54% over last decade.
Virginia 55 Northern Virginia (Washington, D.C.)	45,299	92.82%	Dale City 39,100 (50%) Manassas 15,438 (10%) Manassas Park 6,524 (100%)	111%	Outward movement of population from Washington, D.C., to bedroom communities due to several major highways linking service territory; residential growth has

TAB IV H

REA Borrowers Provide Service to Exclusive Recreation Resorts That Benefit Middle- to Upper-Income Visitors

- Some borrowers have used REA loans to extend and upgrade service to exclusive ski, boating, golf, beach, and lake resorts which benefit mainly the upper-income vacationers. This is inconsistent with the RE Act's original purpose of providing electric and telephone service to rural areas.

- Examples include: world famous ski developments at Vail, Aspen, Snowmass, and Steamboat Springs, Colorado, as well as exclusive beach, boating, golf, and tennis resorts such as Hilton Head Island and Kiawah Island in the Carolinas (see chart IV H-1).

- Under proposed Administration legislation, the REA Administrator will not allow any partial REA loan guarantees if he finds that the predominate purpose of such a loan is to provide electric or telephone service in an area that is largely for recreational use.

TABLE IV H-1

Examples of Recreational Use of REA Loans

Borrower	Quotes Available From Borrowers' Power Requirements Studies Required by REA
o Colorado 34 Holy Cross	"...Holy Cross serves several ski resorts including the world famous developments at Vail, Aspen and Snowmass. As the recreation industry expanded over the past several years, so did the cities, towns, villages and rural areas to provide necessary housing, goods and services needed by both the tourist and permanent resident..."
o Colorado 36 Yampa Valley	"...The area is recognized nationally as a winter and summer resort, with a major ski area and numerous subdivisions, condominiums and other residential and commercial developments... Most of the growth in the service territory is expected to be associated with the Steamboat Ski Resort... The nearby Yampa Valley Regional Airport is being expanded to accommodate jets for non-stop American Airline charter ski flights..."
o Pennsylvania 21 Somerset	"...One of the top ski resorts in the U.S., Seven Springs Farm, Inc., is served by the cooperative. It features the largest artificial snow surface in the world, according to its owner, and continues to expand its skiing on an almost annual basis. There is a modern 10-story high rise motel along with several hundred condominium apartments and townhouses located nearby... The service area also includes another large residential-recreational development known as Indian Lake. This development includes a 750-acre lake, two golf courses, ski slopes, a lodge, condominiums and townhouses and an airport..."
o New Mexico 11 Kit Carson	"...Colfax County in the Moreno Valley.. is primarily tourist oriented because of the beauty of the mountainous area and is well adapted for seasonal residences... The district has grown rapidly in recent years because of the development of a large recreational and residential complex by the Angel Fire Corporation. This includes a ski area complete with snow making machinery, condominiums, motels, a country club, golf course, fishing lakes, restaurants, a shopping center, etc..."
o S. Carolina 25 Berkeley	"...The Kuwait Investment Company purchased a coastal island called Kiawah... This is a very exclusive development... To date, the Kuwait Investment Company has invested about $60 million in developing the island... Seabrook Island is similar to Kiawah and is in fact adjacent to it..."
o S. Carolina 40 Palmetto	"...Hilton Head Island's resort development has been the largest contributing factor to Palmetto Electric's rapid growth... Figures show that over 330,000 tourists visit Hilton Head each year, and that the average daily population is nearly double the permanent Island population of 7,500 residents, as vacationers and conventioneers flock to Hilton Head's thirteen (13) golf courses and 180 tennis courts. Two major golf tournaments and two tennis tournaments help to draw more and more Island visitors. Seventy-one (71) restaurants do a thriving business throughout the year..."
o Alabama 20 Baldwin County	"...The rapid increase in consumer additions is concentrated primarily in the 'Pleasure Island' area which includes the coastal area between the Gulf of Mexico and the Intracoastal Waterway... This relatively low-density development has given way to high-rise condominium and resort hotel development over the last several years... most of the owners and investors of the condominiums, townhouses, and other facilities are seasonal visitors..."

TAB IV I

Only A Few REA Borrowers Default on Their Loans

Electric Borrowers

- There are 11 electric borrowers in default. Five are distribution systems and 6 are generation and transmission cooperatives.
- Of the nearly 900 active distribution borrowers, only 5 have defaulted on loan amounts of $280.1 million. REA is in the process of working with each willing borrower to reach agreement on a debt restructuring to secure repayment of the loans.
- Of the 63 generation and transmission (G&T) borrowers, 6 are currently in default or bankruptcy involving $5.15 billion in outstanding loans.

Telephone Borrowers

- Of the 920 active telephone borrowers, none have defaulted on their loans
- Overall, less than 0.6 percent of all REA borrowers are in default. Nearly all of these are G&T borrowers.

TAB IV J

REA Borrowers' Electric Rates Are Comparable to Rates Charged By Investor Owned Utilities

Comparisons were made between rates charged by 919 REA borrowers versus neighboring Investor Owned Utilities (IOU's) which compete with respective REA borrowers. In instances where no competing IOU's were available, neighboring Publicly Owned Utilities (POU's) were used for comparison. Rate comparisons were made for residential service at the 1,000 kwh per month usage level (including fixed customer or demand charges) as of January 1, 1986.

A simple comparison of rates indicates:

- 261 REA borrowers or 28.4 percent had rates which were lower than their neighboring IOU and 658 REA borrowers or 71.6 percent had rates that were higher than their neighboring IOU.

It should be recognized that this survey did not take into account the effect of borrower annual profits on the rates that REA borrowers charge their residential customers. Since REA borrowers' customers are also the owners or shareholders of the cooperative, they are the legal owners of these profits whether or not they are distributed. In 1986, profits represented 7.1 percent of overall REA distribution borrower operating revenues and this would significantly reduce rates paid by their customers.

The REA survey was limited to REA borrowers and neighboring utilities, thus leaving out a large number of utilities serving customers in the U.S. A more comprehensive method of comparing rates would examine the total overall rates charged nationwide by REA borrowers versus IOU's. This comparison would include rates charged by all IOU's not only in rural areas but in urban areas as well, such as New York City where electricity rates are the highest in the Nation. Also, this comparison would include rates charged to all customer classes -- not just residential. Further, the approach would also examine average rates charged for the entire year and not just the winter since many utilities have seasonal rates.

The Department of Energy and the Energy Information Administration has completed this more comprehensive survey in its "Annual Electric Utility Report" for 1986. It indicates that the total overall rate charged by IOU's nationwide was 6.66 cents/kwh and the overall rate charged by REA cooperatives was 6.81 cents/kwh or only 2.3 percent higher. If the appropriate adjustment were made for cooperative profits owned by their customers, the REA rates would be even lower.

TAB V A

Origin/Goals

In 1935, REA was established to provide credit for extending electricity to rural areas. Federal credit support was needed in the Depression since established utilities did not service rural areas due to low investment returns. In 1935, only 12 percent of U.S. farms had electricity. In 1936, REA's long-term lending rates was 3.0 percent, and Treasury's long-term borrowing cost was approximately 2.7 percent.

Evolution and Changes to REA Over Time. The Congress has made four major changes to REA since it was established.

- In 1944, Congress fixed REA long-term lending rates at 2.0 percent which was above Treasury's borrowing cost.
- The second major change occurred in 1949 when REA was expanded to loan funds for telephone service in rural areas.
- In 1971, The Congress made a third major change by establishing a second source of subsidized loans for telephone borrowers through the Rural Telephone Bank (RTB).
- In 1973, an amendment to the RE Act partially consolidated the program into the rural electrification and telephone revolving fund (RETRF).
  - The RETRF was capitalized by forgiving interest on $7.9 billion in Treasury loans. These loans are scheduled to be repaid beginning in 1993.
  - The RETRF is allowed to finance its operations through debentures (certificates of beneficial ownership).
  - The RETRF makes standard long-term loans at 5.0 percent interest (the approximate Treasury borrowing cost in 1973), and 2.0 percent loans for extreme hardship cases.
  - The 1973 amendment also authorized REA to guarantee loans made by other lenders. Six months later Congress authorized the FFB to make direct loans guaranteed by REA.

TAB V B

REA Borrowers

Electric Borrowers. The electric program has around 900 active electric distribution borrowers, which provide retail electricity to end-use customers. Nearly all of these are organized as Federal-tax-exempt cooperatives.

- As a group, they serve in 46 states and Puerto Rico.
- REA electric distribution borrowers provide electricity to over 10.5 million electricity consumers of 11 percent of all electricity consumer nationwide.
- Non-farm and farm residential customers account for 62 percent of sales; 34 percent of sales are to commercial customers; and 4 percent goes to irrigation and for resale.
- Revenues totaled $11.8 billion in 1986.

In addition, the electric program has 63 active power supply borrowers that are wholesale suppliers of electricity. Many of these borrowers are also Federal-tax-exempt cooperatives.

- These borrowers have total assets in excess of $36 billion with annual sales of $8.2 billion in 1986.
- As a group, these borrowers own 31,087 megawattes (mW) of power generation capacity or the equivalent of 124 power plants each with 250 MW capacity.

Telephone Borrowers. The telephone program has around 900 active borrowers that include tax-exempt cooperatives (about 27 percent), independent corporations, and corporate subsidiaries of major telecommunications holding companies

- As a group, these borrowers serve 46 states as well as Guam, Puerto Rico, and the Mariana Islands.
- Telephone borrowers serve almost 5 million access lines, which is about 4 percent of the total telephone utility industry.

TAB V C

Current REA Lending Programs

There are three major subsidized lending programs administered by the REA with about $36 billion in total outstanding loans and an additional $7.6 billion in direct loans approved but not yet advanced.

REA 100 Percent Guaranteed Loan Program. REA 100 percent guaranteed loans are used to primarily build electric power supply facilities and for large-scale telephone facilities. Such loans include: Federal Financing Bank (FFB) direct (Treasury long-term rates plus one-eighth of one percentage point); and other private lender loans (at rates agreed to by the borrower and private lender). At the end of 1987, it was the largest of the REA lending programs with $21.2 billion in direct liabilities on FFB loans; contingent liabilities of $1.4 billion on private lender loans; and liabilities of $4.2 billion on guaranteed loans approved but not yet advanced. Loan levels enacted for 1988 are shown below:

FY 1988 Enacted Loan Levels
(in thousands of dollars)

	Floor	Ceiling
Guaranteed Loans.	933,075	2,100,615

Direct Five Percent Interest Loan Program. Five percent direct loans are used to build and upgrade electric distribution and telephone facilities and by qualified electric power supply borrowers to build transmission facilities. The direct loan program is the next largest with: $13.1 billion in loans outstanding; and $2.4 billion in loans approved but not yet advanced. The loan levels for the direct loan program in 1988 are:

	FY 1988 Enacted Loan Levels (in thousands of dollars)	
	Floor	Ceiling
Direct Loans:		
Electric Program.	622,050	933,075
Telephone Program	239,250	311,025
	861,300	1,244,100

Rural Telephone Bank. The Rural Telephone Bank, which through 1987 had charged a cost of money lending rate, must now charge, under current law, a below-cost lending rate based on a complex formula that would set RTB lending rates just over 5 percent when Treasury borrows at 9 percent. Such loans are made available to financially stronger borrowers to build and upgrade telephone facilities. The Rural Telephone Bank has $1.4 billion in loans outstanding; and $0.8 billion in approved loans that are yet to be advanced.

	FY 1988 Enacted Loan Levels (in thousands of dollars)	
	Floor	Ceiling
Rural Telephone Bank.	177,045	210,540

INTEREST RATES

Senator BURDICK. Mr. Hunter, you paint a very rosy picture in your testimony about both electric and telephone borrowers. While you cite many different factors for painting this picture, you do not cite what I consider to be the most important factor, and that is that customers of telephone and rural electric borrowers continue to pay higher rates than their investor-owned counterparts.

According to the information that I have, over 71 percent of rural electric co-ops have higher rates than their urban counterparts. In my mind, this is the bottom line as far as the program is concerned.

If you think REA has served its purpose, why do REA borrowers still have to pay more for their electricity? Why do telephone users have to share lines?

Mr. HUNTER. I believe we all recognize that there is a difference in providing electric service to the rural areas. The cost of providing the facilities to cover those areas is greater. That is a natural phenomena that we know does exist.

The other thing though that we need to touch upon and recognize is that for a distribution co-op, the average cost of interest payment is less than 5 percent of their total cost of operation. When you take that into account, it becomes obvious that a modest increase in the interest rate would not create a great burden on the person who is being served.

Senator BURDICK. It may not be a great burden, but their city cousins 5 miles away get the electricity cheaper than they do in the country.

Mr. HUNTER. This is, like I say, a very natural phenomena. It is normally more difficult and more expensive to serve an area where the population is relatively low.

There is reason for good management. There is reason for other approaches to the mechanics of providing service that could be taken by management to achieve cost savings.

We favor, for instance, mergers when possible. We hope that there are other approaches that can be made by borrower's management that would have more impact than just the question of how much or how little the interest rate may be.

SERVICE TO RURAL AREAS

Senator BURDICK. Mr. Hunter, you and I know why REA was born, because the electric and telephone companies then did not want to serve the rural areas because it was not economically feasible. That is why the REA came into being.

Now don't you think that as long as they were not willing to serve when they could have served, that the farmers in the use of their lands, lines, and their telephones should have some consideration, an evening-up process?

Mr. HUNTER. Mr. Chairman, as you well know, I am one of those farmers that we talk about; so, naturally, I am concerned about that. I am certainly concerned about it in this time of economic problems.

In many cases the burden of excess taxes, the burden of excess cost to government in various ways does make it more difficult for the farmers.

I do come back to the fact that those borrowers themselves have prospered well in these last several years. We have data which shows that the increases in their revenues, in all of the measures of economic wealth, have improved over the years. This says that REA, I think, is handling its responsibilities to provide a support to the borrowers. Certainly the support that you spoke of earlier in the building of the facility was one of the great booms that ever happened in this nation. Both the furnishing of electricity and the furnishing of the telephone have provided two of the greatest needs in rural America. I think that the agency and the Congress that worked with it have every reason to be proud. But we are living in different times today.

BORROWER PROSPERITY

Senator BURDICK. What bothers me, Mr. Hunter, is that in your testimony you testify about how well a lot of these cooperatives are doing with telephone and electric service. Why don't we leave them alone if they are doing so fine? Why do we disturb it right now? They are doing fine under the present situation. So now what we are going to do is put more cost on them. That is what is going to happen.

If they are doing so well, why don't we leave it alone?

Mr. HUNTER. Mr. Chairman, I think that the thing that is probably riding most of you awfully heavily has to be taken into consideration today more than it ever has been before. I am speaking about the budget problems, the problems of outlays, that perhaps can be decreased in some cases. I will grant readily that REA is not a great big drain to the Treasury as are some other bigger programs. I think all programs have to be measured as to how strong or how capable they are, and how necessary they are. If there is another way that they can be approached which will make it possible for the same service to exist, the same prosperity for those borrowers and also the same service for the rural folks they serve, they would not be as big a draw on the federal government.

Senator BURDICK. Well, we can talk about drawing on the Treasury. I can give you a big draw. I haven't seen any reduction in the military budget.

Mr. HUNTER. I think you and I would both like to see many other reductions if we had our way, and I admire you for it. But I think that today we have to address—I have to address as an administrator—the question of what can we recommend with respect to REA that will cause a reduction in the load on the federal government.

One of the reasons that I feel that our borrowers have been doing so well, that their incomes and their total wealth have increased so rapidly in recent years is the subsidy from the taxpayer. It has come in part from the fact that there is a lot of support being given by the federal government.

Senator BURDICK. Well, their well-being in the rural areas due largely, as you say, to the rural electrification program, and so forth, is part of the reason that they are doing well. That is why they are contributing to the Treasury. So I don't know why we want to spoil a good thing. That is my point. We are doing fine.

Mr. HUNTER. We have faced over several years now the issue that sometimes is stated this way—If it ain't broke, don't fix it.

The federal government is near broke. The federal government has some real troubles and they are money troubles. I think every one of us, regardless of what agency we represent, or who we are, or where we come from, if we have a love for this country, we have to at least search for ways that we can relieve the country of the budgetary problems.

Senator BURDICK. Well, I guess we are on a plain of disagreement. I just believe that keeping our farm organizations like the REC's healthy and prosperous is a direct benefit and help to everybody in the country in their buying power. And you and I were both around when they did not have an REA system, and we know what the conditions were. And I am not sure that you don't want to go back to that. I am just not going to argue any further with you. I am just going to say that when I played for the University of Minnesota we had a system. If we had a play that worked to make ground gain, we would keep working it. And we had a play called 64. If it made ground, we kept working it. It was successful.

This is successful. This is a program that has been successful. Why change the signal? But that's enough.

RURAL DEVELOPMENT

Mr. Vautour, Secretary Lyng recently received a letter signed by 42 Members of the Senate requesting that the Rural Electrification Administration establish an economic unit to issue technical instructions and provide guidance to rural electric and telephone systems on specific rural development projects.

You responded to that letter in a general way by discussing USDA's encouragement of rural development; however, your response did not provide specific efforts that USDA is doing, and it certainly did not discuss any specific actions that REA itself is taking to further this effort.

Furthermore, your budget proposal, rather than including a unit to provide this technical assistance, suggests reducing the staff-years by 50. In fact, you propose reducing the amount available for salaries and expenses by $2.5 million.

Didn't you also receive a similar letter from the House of Representatives?

Mr. VAUTOUR. That is correct, Mr. Chairman. I think the response that I gave had to be somewhat general in a missive of that short nature. I would like to furnish for the record a much more detailed explanation.

[The information follows:]

USDA's Rural Development Effort

The Department of Agriculture recognizes the special partnership shared with rural Americans. There are opportunities to effectively meet the growing needs of Rural America and USDA's Six Point Rural Regeneration Initiative is one tool to continue the task.

Following is an outline and status report relative to the Six-Point Initiative:

Point One emphasizes the need to develop leadership at the local level. Leadership is a critical component. Without sound managers, those small towns and localities find themselves at a disadvantage. USDA's solution to meet that need is to tap the considerable resources found within the Cooperative Extension Service (CES). The Extension Service has a vast network of specialists that have been charged to develop educational programs to expand the pool of quality leadership and improve the educational support for community leaders.

Current estimates indicate that CES provides more than 900 staff years of effort to deliver programs to 3,500 rural governments and 2.1 million rural officials.

Four Regional Development Centers are working with USDA. They conduct research, coordinate conferences, and execute the education programs in rural America. The Centers are active in rural economic development and work closely with States, universities, the private sector, and the many Federal agencies with a rural development role.

Point Two of the strategy establishes Rural Enterprise Teams (RET). These teams are used to deliver technical assistance to rural officials. The Teams are comprised of a unique mix--USDA specialists who live and work daily with rural citizens and members of the State Government. Private sector organizations, economic development corporations, and financial institutions play a key role. This blend of talent, coupled with broad experience and commitment to rural development, lends itself to communities needing assistance.

The group provides technical assistance, guidance, and develops plans tailor-made for that particular community. The needs vary greatly from state to state, indeed from county to county. Local people are in the best position to know what their exact requirements are.

Currently, there are well over 500 Rural Enterprise Team members in 44 States. Their ongoing activities in promoting rural economic development are evident and the impact of the RET is noticeable.

Rural Enterprise Teams are as diverse as the communities and people they serve. In Iowa the teams are organized geographically. In Arkansas the RET's have specific expertise such as Environmental Pollution; Business and Economic

Development; Rural Development and Leadership; and Alternative Crops and Enterprises. Missouri has its Rural Enterprise Team organized by regions and districts of the State. The important fact is that the team is tuned to local concerns.

Point Three is USDA's Rural Information Center--a nationwide information clearinghouse and referral service. Local officials may access the service through a local Extension Service office. The caller accesses a data system, located at the National Agriculture Library, that has the world's largest collection of agricultural information and rural related topics. The simplicity of the system, working through the Cooperative Extension Service, allows local officials to obtain the information required. The Extension Service also provides follow-up assistance.

To date, callers have requested information ranging from water and sewer questions to population statistics to specifics on how best to diversify a local economy.

Point Four of USDA's Rural Strategy calls on all USDA agencies with a research mission to increase already existing efforts devoted to rural economic development. Currently, the Economic Research Service is providing on an ongoing basis, statistics and data on rural America. Their RURAL ECONOMIC DEVELOPMENT FOR THE 1980's is an excellent example. Agencies within the Department are exploring such issues and questions as: what is the actual need for nonfarm full-time and part-time workers in rural communities? What resources are available? What markets exist or can be developed?

The Agricultural Research Service (ARS) has expanded research on development of new uses, both food and industrial, for agricultural commodities, which is a basis for economic development in many areas.

The Fifth point of the strategy is designed to meet the need of financing those community facilities and infrastructure projects in rural America. The Secretary has instructed the Farmers Home Administration to redirect its Business and Industry (B&I) loan program funds. Funds will be used to create more employment opportunities and give preference to those communities demonstrating the greatest need. In FY 1988, $95.7 million will be available. The 1986 B&I program loaned $56 million and approximately 2,000 jobs were created. In 1987, some 7,000 jobs resulted from $95.7 million; and it is projected that in 1988 with the same funding, 10,000 jobs could be created or saved.

The last point of the Rural Regeneration Strategy stresses the priority of rural development at the U.S Department of Agriculture. By placing overall direction and coordination of programs in the Office of the Deputy Secretary, USDA keeps to the forefront its commitment to assisting rural America.

Rural America is changing and the ways to address those needs are also changing. The redirection and targeting of resources has proven to be an effective means of helping make a difference. The USDA plays the role of managing partner in this undertaking. The most important role will be that of the rural people themselves. They must make their own decisions, allocate their resources, use their own ingenuity, and set their own course. USDA will continue to be an active and willing partner.

About 18 months ago the President established the Task Force on Rural Communities. This group, consisting of 20 high-ranking government officials, cuts across all Federal agencies having rural responsibilities.

The Task Force meets regularly and is considering many concepts in the search for a proper Federal response to changing rural needs. The Group reported to the Economic Policy Cabinet Council at the White House with recommendations for action by all pertinent Federal Agencies.

The Cabinet Council responded with the following plan: The Task Force on Rural Communities became an ongoing working group of the Economic Policy Council. Secretary Lyng chairs the Task Force with a three part mission. First, the group will work to seek better coordination of Federal rural development programs. Secondly, the group will hold hearings on the effects of Federal programs and regulations on rural communities. Lastly, the group will continue to develop policy proposals for consideration.

This short paper just highlights USDA initiatives and progress and further emphasizes our committment to assist in the development of America's small towns and rural communities.

DEVELOPMENT AT LOCAL LEVEL

Mr. VAUTOUR. I will, at this point, indicate to you that it is our feeling, and I feel this very strongly because I have spent the better part of my adult life in rural development in one form or another. I have found for years that development takes place at the local level. The leadership has to be generated at the local level. When I speak "local" I am referring to the town, county, and the state.

If the commitment for rural development is not at that level, it most assuredly will not happen.

Now on May 19, 1987, Deputy Secretary Myers announced a six-point development initiative that we think answers very broadly the overall needs of rural America in terms of furnishing infrastructure, furnishing help, and furnishing the wherewithal that these local communities are going to need in order to accomplish the rural development.

We feel that 10 specialists located here in Washington would be counterproductive. We don't think they can respond to the needs of a local community the way the six-point program can.

Specifically, one part of that six-point program is that the Cooperative Extension Service will be working diligently to develop the local leadership necessary to get industrial or rural development of any kind going in a local area.

Second, there will be formed, and has been formed in some 35 states now, rural enterprise teams comprised of all of the field personnel from agriculture as well as from state and local agencies, and from the private sector. If a local community wants, needs, or desires information, help, direction of any kind, this team will be mobilized and sent to that particular community to address a specific need for a specific community. We think that that can be much more responsive and furnish much better information than the 10 specialists located here in Washington.

REA ROLE IN SIX-POINT PROGRAM

Senator BURDICK. What is REA doing in that six-point program?

Mr. VAUTOUR. REA in the six-point program functions basically the same way as Farmers Home does, that is, the furnishing of the wherewithal for furnishing infrastructure. For instance, you cannot have rural development without electric power. You cannot have rural development without communication, that is, telephone, radio telephone, satellite, or any other kind of communication.

REA performs, I think, a very real function in financing local cooperatives and making sure that they have the means to be able to furnish the foundation necessary for rural development.

Now I would also point out that local leadership should come, and must come, from local cooperatives, not from a federal agency but from a cooperative which, in all fairness, is the private sector, either in terms of the rural electric generating cooperatives, the electric distribution cooperatives, and the telephone cooperatives. We think that the leadership out in the rural areas, from those cooperatives, could be very helpful.

Senator BURDICK. I referred to the 42 Members of the Senate who had recently sent a letter to Secretary Lyng on this question. Did you receive a similar letter from the House of Representatives?

Mr. VAUTOUR. Yes, sir, we did.

Senator BURDICK. How many signers on that letter?

Mr. VAUTOUR. There were 75.

SALARIES AND EXPENSES

Senator BURDICK. In fiscal year 1987, did you return any salaries or expense money because you did not use it?

Mr. VAUTOUR. I did not hear you, sir.

Senator BURDICK. In fiscal year 1987, did you return any salaries or expense money to the Treasury because you did not use it?

Mr. VAUTOUR. I would have to ask the Administrator to respond to that, sir,

Mr. HUNTER. Mr. Chairman, if I may respond. We did return about $2½ million out of the roughly $30 million that was allocated to us. This has been done. I will be real frank with you. Each year that I have been Administrator we have searched for ways that we could be more efficient and at the same time meet the charges that are required under the act and the law.

Senator BURDICK. Since you have continually not used all of your salaries and expense money, and because of the strong showing of support from Congress for this economic development unit, why don't you go ahead and institute it?

Mr. HUNTER. I would go back—and I don't want to repeat what Mr. Vautour has already discussed—but the thought of a team to go out and participate in rural development is provided in the six-point program that is offered by the Secretary. And more than offered, it is really being done.

One of the things that is high on that list is—I believe the No. 2 item—the creation of rural enterprise teams. Those teams are made up of the members of the food and agriculture groups that exist throughout the nation. Those are organizations that are already there. They represent the various agencies that serve rural America, and they also represent in many cases state government and state and county entities. If you put those together, you have a working team out there that, in our opinion, are better, and will go much farther in this effort than 10 new people. The effort is very worthwhile; it is being done.

Senator BURDICK. It seems to me that we should be doing everything we can to shore up rural areas of this country because they are losing population, they are losing businesses, and they are losing their economy. We have got to turn that situation around and you could be a big help if you put your mind and resources in that regard.

Mr. HUNTER. Thank you, sir.

We are very interested in that. I think the effective management of REA, the efforts that are being made by the agency and by the staff fits in very well with that. Certainly the activity and the emphasis that the Secretary has put on this need I think is very real.

Senator BURDICK. The Senator from Iowa.

Senator GRASSLEY. Thank you, Mr. Chairman.

RURAL ECONOMIC DEVELOPMENT

I am sorry I missed your testimony, but I will have a chance to read and study it before we make our decisions.

I would like to start with you, Mr. Vautour. You and Mr. Hunter both expressed in your testimony a concern that the expansion of the Rural Electrification Administration granted under the 1988 Continuing Resolution in the Budget Reconciliation Act is duplicative of existing programs.

Last week, Bob Bergland testified before the Senate Budget Committee, of which I am a member, stating that the Rural Electric Cooperatives could play a great role in developing economic projects within rural communities. I had the experience of working with the REC's during the March recess when we were in Iowa holding a series of economic development conferences under the program that we passed here 2 years ago, called FRED, Financing Rural Economic Development.

So in my state, the REC has been very active in promoting rural economic development.

Why do you feel that this would be duplicative if we were to do this?

Mr. VAUTOUR. You are quite right, Senator. There are seven rural enterprise teams in Iowa and I would say that that is a national record. It indicates obviously a very deep commitment from people in Iowa, and from various regions of Iowa, the seven regions that represent these teams to rural development. As I told Senator Burdick, I have spent all of my adult life in rural development in one form or another.

I was commissioner of development for the state of Vermont. I live in a rural area. I am served by a REA or a cooperative. And I have seen rural development in its embryonic phases for a number of years now; and one truism very clearly comes out, and that is that without leadership at the local level it just flat out is not going to happen.

I don't think anyone can dispute that point. The matter of more emphasis here in REA at the national level I think in some cases could be counterproductive.

The role of cooperatives out in rural America I think is very real, very vital, and can make a very strong contribution to rural development. But the REA here in Washington cannot respond to particular needs, for instance, in Sioux City, IA, or in any other community for that matter.

We think that the rural enterprise team and the Cooperative Extension Service working with local leadership and developing local leadership will go an awful long way toward accomplishing that which we all want for rural America—a better standard of living. But it can be responded to at the local level with a local problem and a particular local need. And anything that is done out of Washington normally has to be painted with a broad brush and cannot get down to being fine-tuned at that point.

Senator GRASSLEY. Well then you do see REA's playing a very important role in rural economic development then?

Mr. VAUTOUR. The local cooperative, absolutely. Absolutely. And I think that either electric distribution or telephone cooperatives, if you will, have the leadership, the business leadership, the business acumen at the local level to take a leadership role. As far as I am concerned, I have asked REA to encourage whenever possible the participation by the local cooperatives in that effort.

Senator GRASSLEY. But as far as at the national level then, you would not go beyond encouragement of the local REC's in rural economic development?

Mr. VAUTOUR. We would hope, Senator, that they would be a member of the RET at the local level. We would hope that they would provide leadership at the local level. But you are quite correct, our viewpoint is that we here in Washington can do little to facilitate a rural enterprise team, for instance, in Sioux City.

Senator GRASSLEY. All right.

LEGISLATION TO EXPAND REA

I would like now to refer to the legislation that has been introduced which, if passed, would expand the function of the REA into the Rural Electrification and Development Authority. The Agency's new function, as we know, would be to oversee all rural development programs under the jurisdiction of the Department of Agriculture.

Is greater coordination of the Department of Agriculture's rural development programs necessary?

Mr. VAUTOUR. Senator, I would point out to you that my title is Under Secretary for Small Community and Rural Development. And when I was selected for this position by the President, with very clear and strong direction from the Secretary and the Deputy Secretary that, in fact, they wanted me to live up to that title; that the coordination of rural development activities is at a higher level—at the Under Secretary level—than it would be at an Assistant Secretary level.

The commitment from me is 100 percent. The commitment from Peter Myers, the Deputy, is 100 percent, and the commitment from Mr. Lyng, the Secretary, is equally as strong.

Now the reorganization, for instance—and there has been talk specifically of moving some of the loan programs from the Farmers Home Administration to REA—I think could be very counterproductive. For instance, the Farmers Home Administration has some 1,932 county offices, 256 district offices, and 46 state offices, none of which REA has. The delivery system of the program I think would be slowed down. I don't think that we could be getting to rural America the wherewithal, the financial resources that we have available to us in as efficient a manner as we are today.

Now for a minute I don't intend to say that Farmers Home is not without its faults. I am the first to admit that. But I think that one of the charges I have is to make sure that we can deliver and streamline it and make it more efficient.

But, specifically, to answer your question, I do not think that moving anything into REA out of an existing infrastructure is going to be productive. I think, quite honestly, it would be counterproductive.

Senator GRASSLEY. Thank you.

Well I think you just answered the natural followup question then. Let's suppose that Congress decided that this is the direction we want to go, if Congress were to determine greater coordination within the Department is in fact necessary. In other words, beyond what you feel you have under your umbrella, would the REA be able to facilitate this new function?

Mr. VAUTOUR. I doubt it.

Senator GRASSLEY. All right.

Mr. VAUTOUR. I doubt that they have the knowledge. They do not have the commercial lending knowledge. Now, to be sure, there are great levels of expertise in utility lending, but I don't think they have it when it comes down to manufacturing gidgets, Senator GRASSLEY. At this point, I am not here to argue with you because I know about it at the local level in my state. I like their involvement. I think it has been very useful. And I am looking at this legislation yet at this point.

ECONOMIC IMPACT STUDIES

Mr. Hunter, one question for you. Your testimony mentions several changes the Rural Electrification Administration would like to see passed by Congress. I am interested to know if any analysis or economic impact studies have been done to determine the impact of these changes on rural communities. If your answer would be yes, that you have had such an impact statement or study, I would hope that you would be able to share the information with the committee.

Mr. HUNTER. We do have considerable information that answers a question that arises quite often. That question is: Can an REA borrower who now borrows from the federal government go to the private sector with a guarantee on a loan and collect and borrow money from the private sector? We do have quite a bit of experience, quite a bit of data that relates to that.

I would be extremely pleased to have the opportunity to provide that to you for the record. Some of it is quite voluminous. It deals with many situations relating to individual borrowers and their rating, and so forth. But we do have a good paper on that.

Senator GRASSLEY. If it is real voluminous, I am not sure that I want to request that it be put in the record.

Mr. HUNTER. Well, how about one page?

Senator GRASSLEY. Well thank you then very much. Thank you, Mr. Chairman.

[The information follows:]

BORROWER'S ABILITY TO SECURE LOANS

In determining REA borrowers' ability to secure loans from the private sector at reasonable rates, REA considered private financing experience and recent debt service ratings of selected borrowers.

Private debt without a government guarantee by all REA borrowers currently exceeds $8.6 billion. This includes $3.4 billion financing by the National Rural Utilities Cooperative Finance Corporation [CFC] that began lending in 1971.

Table III B-1 shows a number of power supply borrowers with well-established private borrowing credentials including solid debt service ratings by Standard and Poors and Moody's.

[The table follows:]

TABLE III B-1
Private Financing Experience and Recent Debt
Ratings of Selected REA Power Supply Borrowers

Borrower Identification & Name		Long-term FFB Debt ($ in M)	Private Debt without REA Guarantee ($ in M)	Total Outstanding Debt 1/ ($ in M)	Private Debt as Percent of Total Debt	Primary Sources of Private Debt 2/	Recent Debt Rating 3/
OH99	Buckeye Po. Inc	56.8	313.0	414.7	75.5	BC, IDB, Mrtg Bonds, PCB	Aa3(M)/AA(S)
CO46	Colorado-Ute. Elec. Assn.	399.1	662.9	1,191.0	55.7	CFC, PCB	A1(M)/A(S)
FL41	Seminole Elec. Co-op	578.4	578.4	1,075.6	53.8	CFC, NCSC Col. Bank, PCB	A1(M)/A(S)
IN106	Hoosier Elec. Co-op	400.5	400.5	874.2	45.8	BC, Irving Trust, PCB	A(M)
ND45	Basin Elec. Po. Co-op	1,055.1	915.8	2,442.5	37.5	BC, PCB	A1(M)/A(S)
IA83	Cent. Iowa Po. Co-op	62.5	77.6	219.4	35.4	CFC, PCB	NA
GA109	Oglethorpe Po. Co-op	2,734.9	1,491.4	4,246.9	35.1	Col. Bank, Citibank, PCB	A1(M)/P1(S)
MO73	Associated Elec. Co-op	623.8	354.2	1,069.3	33.1	CFC	A2
KY59	East Kentucky Po. Co-op	501.8	284.5	909.0	31.3	CFC, Insurance Cos, PCB	NA
KS53	Sunflower Elec Co-op	411.8	144.3	591.5	24.4	BC, PCB	NA
NM18	Plains Elec. G&T Co-op	370.1	93.0	489.0	19.0	PCB	NA
KS54	Kansas Elec. Po. Co-op	194.5	43.5	238.0	18.3	PCB	NA
TX155	San Miguel Elec Co-op	375.4	78.2	453.6	17.2	PCB	NA
IA84	Corn Belt Po. Co-op	52.4	22.4	130.4	17.2	CFC, PCB	4A-2(D)
OR42	Pacific N.W. Generating Co.	53.9	9.7	63.5	15.3	PCB	NA
CO47	Tri-State G&T Assn.	556.2	106.4	739.7	14.4	PCB	A3&Baa(M)
NC67	N.C. Elec. Membership Corp.	1,187.7	197.5	1,393.6	14.2	Duke Power, PCB	NA
AR34	Arkansas Elec Co-op	350.8	60.4	447.9	13.5	PCB	A1(M)/P1(S)
AL42	Alabama Elec. Co-op	221.4	48.8	400.0	12.2	CFC	NA
MS53	So. Miss. Elec. Po. Assn.	607.2	89.1	758.1	11.8	BC, PCB	NA
MN107	United Power Assn.	584.4	84.0	722.2	11.6	PCB	NA
SC51	Saluda River Elec. Co-op	418.6	51.9	470.7	11.0	Duke Power, PCB	NA
MN106	Cooperative Po. Assn.	564.0	73.4	713.5	10.3	CFC, PCB	NA
OK32	West. Farmers Elec Co-op	452.6	59.9	600.3	10.0	CFC, Wichita Bank	NA
PA27	Allegheny Elec. Co-op	498.1	30.8	529.3	5.8	CFC, PCB	Aaa(M)
	Total	13,312.0	6,271.6	21,183.9	29.6		

1. Includes REA debt, REA guaranteed FFB debt, REA guaranteed private debt, and non-REA guaranteed private debt.

2. BC (Banks for Cooperatives), CFC (Cooperative Finance Cooperation), and PCB (pollution control bonds).

3. M (Moodys), S (Standard and Poors) and D (Dunn and Bradstreet). NA indicates either not applicable or not available.

STATEMENT OF SENATOR SASSER

Senator BURDICK. The gentleman from Tennessee.

Senator SASSER. Thank you, Mr. Chairman.

I request permission, Mr. Chairman, to insert my prepared statement in the record. And I will have some questions later, Mr. Chairman, that I would also like to submit for the record.

Senator BURDICK. Your statement will be received.

Senator SASSER. Thank you, sir.

[The statement follows:]

STATEMENT OF SENATOR JIM SASSER

Thank you, Mr. Chairman. Once again, the administration has submitted a budget and testimony that is based on the assumption that the Rural Electrification Administration can be eliminated as all but a token agency. I am confident that, once again, Congress will reject these proposals and ensure that the REA continues to provide services vital to rural America.

The Rural Electrification Administration has been and continues to be of critical importance to the development of rural America. Since REA was established in 1935, electric power has been brought to virtually all areas of this country. The extension of electrical service meant not only the comforts of modern appliances, it meant business expansion and economic development. It has meant the continued vitality of rural America.

REA provides vital services to my own state of Tennessee, and its work there is not finished. There is certainly a continuing need for a strong and vital Rural Electrification Administration.

So I take issue with the administration's contention that we no longer need REA. We cannot rest on our laurels or we will find the lights going out over rural America. The administration's policies, and the President's budget, are shortsighted and destructive of what we have accomplished in bringing electric and telephone service to the rural sections of our country.

Many electric and telephone cooperatives have old and outdated equipment. Within a very few years they face significant replacement and modernization costs. We must ensure that strong and effective REA programs are available to rural utilities to finance these improvements.

Despite the administration's claims, the plain fact is that private loan sources are not available to most REA borrowers. REA borrowers have an average ratio of net worth to total assets of 30 percent—far below the 50 to 60 percent required by commercial lenders. Without the programs of the Rural Electrification Administration, rural utilities will be unable to meet customer needs in the future.

The simple fact is that providing utility service to high-cost rural areas is uneconomical. REA borrowers serve an average of five customers per square mile, compared with 50 for all telephone companies, and about 130 for the Bell companies. The administration's claim that REA service goes to many nonrural areas is based on a customers-per-mile formula that is virtually pulled out of a hat. By any common standard in the industry, the vast number of REA borrowers are truly rural.

Additionally, I am disturbed by REA's continued insistence on phasing out the Office of Engineering Standards despite the clearly expressed views of Members of both the Senate and House. Only one of these positions has been filled. The elimination of this office will place a serious burden on the ability of utilities to install equipment which meets adequate engineering standards.

Finally, the administration's fiscal year 1989 budget proposes to eliminate the Direct Loan Program, the 100-percent REA-guaranteed loans, and all support to the rural telephone bank. It proposes to replace them with private loans backed by REA under severely restricted eligibility rules.

In conclusion, Mr. Chairman, I encourage my colleagues to join with me in defending the REA against the administration's latest attempt to effectively eliminate the agency. I am confident that they will do so, and that the REA will continue to provide its many important services to rural Americans.

TELEPHONE PROGRAM

Senator BURDICK. Mr. Hunter, let's talk about the telephone program for a moment.

While we argue about whether or not the REA has served its purpose, it is clear to me that there is a major need in the telephone industry for continued REA assistance. In many cases, the telephone systems that are in place in rural areas are now antiquated. In many cases, they are 40 years old, and it is time for upgrading and replacement of the equipment.

I am not an expert in this newfangled technology, but I hear about fiber optics and digital switching equipment and so forth, that is revolutionizing the telephone system. Are you familiar with this new technology?

Mr. HUNTER. We are participating and financing most of these things that you speak of. Fiber optics has been emphasized pretty heavily. We could provide—I do not have it at my fingertips—the amount of fiber optic usage that we have actually financed which is already in service. Modernization is considerable, and the technology changes almost day by day. We have quite a bit of material that would fit very well with specifics. We do participate. REA has a good staff that works closely with other agencies and with the industry itself in determining the ways that technology can be improved.

[The information follows:]

STATUS OF FIBER OPTICS IN THE REA PROGRAM

In 1978, REA sponsored its first field trial of fiber optic systems in cooperation with the Commonwealth Telephone Co. of Pennsylvania. This system was a multimode fiber linking rural central offices. Since then the economics, capacity, and reliability of fiber optics have improved so much that all new interoffice trunking systems installed by REA borrowers are the more versatile single-mode design. In 1987, a total of 116 contracts were approved to construct new or improved outside plants; many include fiber optics. We have received information about 50 of those contracts and 17 of these have fiber optic facilities. These 17 contracts will result in the placement of 871 miles of single mode fiber optic cable at a cost of $4,520,744. In addition, fiber optic terminal equipment is required for each installation which can cost $100,000 to $200,000 per system. It is estimated that a total of $20 million was spent on fiber optic in 1987.

PRIVATE CREDIT

Senator BURDICK. I am told that it is impossible for them to go into the private market and get credit in order to upgrade their equipment and facilities. I have asked my telephone people in North Dakota whether they can go to the private market for assistance, and they tell me that, no, they can't. They would not be approved for private credit. So where do they go?

Mr. HUNTER. One of the entities that exists in the telephone industry is the Rural Telephone Bank. The Rural Telephone Bank was created quite a number of years ago with the expressed intention that it would eventually become private; that it would gradually build its economic capability and its feasibility. After a while it reached that point. In fact, 1995 is referred to as a target date for privatization. At that time privatization could occur—and this again would be completely at the service of the rural telephone borrowers—we are concerned that the Omnibus Budget Reconciliation Act of 1987 carries some language in it which would make it very difficult to continue to build the strength of the Rural Telephone Bank. For that reason, within this budget proposal are some amendments to eliminate some of the items that are in that Omnibus Act.

FFB REFINANCING

Senator BURDICK. As you know, the Agriculture Appropriations Act for fiscal year 1988 stipulates that you shall allow refinancing to a minimum level of $2.5 billion. While I recognize that the Reconciliation Act provides for a minimum of $2 billion in fiscal year 1988, the Appropriations Act extends beyond fiscal year 1988 and is a permanent section of law which then means that you will be required to approve another 500 million dollars' worth of refinancing as of October 1, 1988, barring the enactment of other legislation which changes this provision.

Do the regulations that you have issued take into account the additional $500 million that must be refinanced next year?

Mr. HUNTER. Mr. Chairman, recognizing the importance of completing our responsibilities as they relate to the prepayment of the 2 billion dollars' worth of loans, REA met this responsibility in record time. I believe it was 66 days from the time that the legislation was enacted until the prepayments actually had been accomplished. That meant that the regulations had been developed and the prepayment activity that was necessary had taken place.

We feel that we have met our responsibilities as it relates to that action.

The regulations that we now have do not address additional refinancing.

Senator BURDICK. How do you propose to use and handle the additional $500 million?

Mr. HUNTER. If we were faced with the extra $500 million, then we would issue new regulations.

Senator BURDICK. Well it is in the law now. You are faced with it, aren't you?

Mr. HUNTER. Well the law is not effective at this time. We have met the responsibilities of the law as it affects us at this present time. And I am very proud of staff, frankly, that they were able to move so rapidly and to achieve that in that short length of time.

Senator BURDICK. Well, staff is telling me that you are technically right at the moment, but that on October 1 the money will be available.

Mr. HUNTER. We have no intentions but to be absolutely ready to perform again like we performed this year if that necessity falls upon us.

NEW G&T STARTS

Senator BURDICK. Mr. Hunter, we have been informed that you have a no-new-start policy as far as generation and transmission co-ops are concerned, Is this correct?

Mr. HUNTER. No, sir; it is not. For a considerable time we have proceeded very carefully to make sure that the feasibility of any application for a new-start was looked at very carefully. For one thing, with the great amount of surplus power that exists within the nation, we did not want to be party to creating problems for our own borrowers who perhaps were competing to sell some of the power that they had which was excess to their own need.

We do at the present time look very diligently at every application that comes our way. We do not have a no-new-start policy. When I spoke about a no-new-start policy a year and a half ago, it was predicated upon the fact that as long as it would jeopardize the excess power we had on hand, that we would be very negative toward making that excess worse.

APPLICATIONS FOR NEW CONSTRUCTION

Senator BURDICK. How many applications for new construction do you have pending? How many have you turned down?

Mr. HUNTER. I will have to ask staff. We do have a few.

Senator BURDICK. If it takes some time, you can supply it for the record. But if you have it here, that is fine.

Mr. HUNTER. We have nine guaranteed loan applications on hand.

Senator BURDICK. Have any been approved or turned down?

Mr. HUNTER. There have been some turned down that I am aware of, but they were not turned down on the basis of a policy position, but on the basis of the fact that they were not feasible. There were other ways that could be pursued, which would be better for themselves and their people.

Senator BURDICK. Maybe you had better provide us with a list to be more specific.

Mr. HUNTER. I would be glad to do that.

One of the things that I might mention, I have been speaking of the guaranteed loans, which are normally the power supply loans. But we have also approved 71 direct loans, which become a part of the same issue to some degree.

[The information follows:]

APPLICATIONS FOR NEW CONSTRUCTION

A loan application was returned without action to the North Carolina Electric Membership Corp. The purpose of this application was to acquire an interest in certain existing transmission and generation facilities owned by Carolina Power & Light Co.. No new generation or transmission construction was involved. REA found that the projected savings did not justify the financing request.

The only other application returned was to the Alabama Electric Cooperative, Inc. This application was for a 50 MW compressed air energy storage [CAES] generation facility. REA found the proposed plant did not meet the requirements for new generation facilities. The new plant must furnish the most economical and effective means of providing new capacity to meet member requirements.

REA is presently reviewing a subsequent lien accommodation request by Alabama Electric Cooperative to support funding by the National Rural Utilities Cooperative Finance Corporation of a 110 MW CAES facility.

CLOSING REMARKS

Senator BURDICK. Mr. Hunter, I must tell you that when the Secretary was up here I told him that I thought this budget was the worst I had seen in many years and I am telling you the same thing. This proposal I am afraid kills the program—pure and simple. And I will tell you this—I don't think it is going to happen.

Your testimony talks of how well the co-ops are doing and how great things are in rural America. I don't know where you have been looking, but things are not that great. The farm crisis is not over. Farmers pay more for their electricity than city folks. Farmers pay more for telephone services. For farmers these are not luxuries, they are necessities. That is why your proposal does not make any sense to me.

If you see the picture any differently, come to North Dakota and see rural America as it really is.

SUBMITTED QUESTIONS

You will be receiving questions for the record from Senators Specter, Burdick, and Cochran.

[The following questions were not asked at the hearing but were submitted for response for the record:]

QUESTIONS SUBMITTED BY SENATOR BURDICK

TELEPHONE PROGRAM

Question: You indicate that the telephone companies are doing very well. If you take each of the factors that you cited in your testimony, for example, the ratio of current assets to current liabilities, average net income or margin per customer, and net income, how did the figures that you list for REA borrowers compare to the figures for all the other telephone companies?

Answer: A table which compares the several financial ratios of REA borrowers to the same statistics for all local exchange carriers as published in the Statistics of Communications Common Carriers, by the Federal Communications Commission for the year ended December 31, 1986, will be provided for the record. [The information follows.]

	REA Borrowers	Local Exchange Carriers
Average Net Income or Margin per access line	$103.65 *	$86.22
Net Income or Margin as percent of Total Operating Revenues	16.1 %	13.1 %
Current Assets to Current Liabilities	364.0 %	138.9 %

*Average Net Income or Margin per customer of $106.46 adjusted to $103.65 per access line for which industry information is available.

Question: Isn't it true that when compared with the other independent telephone companies, the REA borrowers are in a much poorer position, and that, in fact, over the past few years, that position relative to their counterparts has been worsening?

Answer: No, that is not consistent with the facts. REA telephone borrowers are substantially stronger and key financial ratios are far superior to independent telephone companies. The financial position of REA borrowers has been improving and they have been able to maintain their strengthened financial standings relative to their non-borrower counterparts.

Question: Please provide those contrasting figures between the REA customer and the other independent telephone companies for the record.

Answer: A table which provides comparable data for REA borrowers and all local exchange carriers will be provided for the record. [The information follows.]

	Current Assets to Current Liabilities	Total Net Income or Margin per Access Line	Total Net Income or Margin to Total Oper. Revenue
REA Borrowers	364.0%	$103.65	16.1%
All Local Exchange Carriers	138.9	86.22	13.1
Illinois Bell	170.1	69.80	12.7
Indiana Bell	147.2	106.07	17.4
Michigan Bell	104.1	77.50	14.0
Ohio Bell	162.5	76.40	13.0
Wisconsin Bell	132.2	68.38	12.2
Bell Tel. of Pennsylvania	136.1	47.02	8.6
Chesapeake & Potomac Tel.	236.9	63.36	10.7
C & P of Maryland	125.3	62.87	11.2
C & P of Virginia	166.0	88.85	14.2
C & P of W. Virginia	125.7	101.05	13.6
Diamond State Telephone	113.4	81.75	14.9
New Jersey Bell	125.4	87.80	14.5
South Central Bell	120.0	94.40	13.9
Southern Bell	126.2	107.77	15.1
New England Telephone	182.7	80.50	12.3
Nevada Bell	81.1	139.60	16.7
Pacific Bell	154.6	87.37	13.8
Southwestern Bell	119.7	67.92	10.8
Mountain States Telephone	147.3	89.14	12.9
Northwestern Bell	146.5	77.26	12.4
Pacific Northwest Bell	132.3	75.75	12.3
Cincinnati Bell	77.7	70.49	10.7
Southern New England Tel.	247.5	85.93	10.8
Continental of California	120.2	161.48	14.2
Continental of New York	128.3	79.24	11.8
Continental of Virginia	95.5	91.03	13.4
General Tel. of Florida	99.7	109.15	14.3
General Tel. of Indiana	101.5	116.92	15.1
General Tel. of Michigan	149.8	86.84	13.5
General Tel. of the Northwest	87.5	110.82	13.0
General Tel. of Ohio	87.6	75.26	11.9
General Tel. of the South	105.2	90.77	12.6
General Tel. of the Southwest	130.5	144.06	16.3
Hawaiian Telephone	95.4	111.99	14.4
Puerto Rico Telephone Co.	657.1	233.98	38.4
United Inter-Mountain Telephone	207.5	98.18	15.0

Question: Your budget proposes to cut the available amount of credit to REA borrowers by 26 percent, yet this same percentage for telephone borrowers themselves is a 48 percent. Why are you cutting the telephone program more than the electric program in terms of the amounts that you would make available from private sources with a minimal guarantee?

Answer: The fiscal year 1989 proposal for the telephone program is $100 million in loan guarantees and $177 million in RTB loans for a total of $277 million. In fiscal year 1987, $230 million of REA direct loans and $185 million of RTB loans were made for a total of $415 million. The fiscal year 1989 budget proposal represents a reduction of 33 percent compared to fiscal year 1987 and considers the amount of loan applications on hand which has been steadily declining. Many telephone borrowers are subsidiaries of large telephone holding companies with annual gross revenues in excess of $100 million. These well-to-do borrowers accounted for almost 26 percent of all telephone loans from 1980 through 1985.

Question: What background material was used to establish these amounts?

Answer: The amount requested for each program was determined after considering the decline in the dollar total of applications received in the past few years, as well as, the total dollar amount of applications on hand at the end of each year. From 1984 the total applications on hand at the end of the year had declined from $537 million to $275 million at the end of 1987.

Question: What was the total demand REA received last year for the direct telephone loan program?

Answer: In fiscal year 1987, REA approved $229,787,000 in direct telephone loans. This represented approval of all of the loan applications that were completed and ready for obligation. An additional $38.8 million of loan applications were in various stages of processing but not complete.

REFINANCING

Question: You continue to push for a program which will allow the prepayment of direct loans without a penalty, and what is more, even at a discount. Therefore, in that program, you would not be getting 100 cents on the dollar. Yet, you've got a program in place where you can allow the refinancing of FFB-guaranteed loans where you would get 100 cents on the dollar. However, you continue to oppose this program, and have only allowed those refinancings which you have been mandated to do by Congress.

It just doesn't make sense to favor one program where you don't even get the principal back and oppose the other program where you do get the principal back. This policy is cockeyed and I just don't see how you expect your proposals to be taken seriously when you come up with such reasoning.

Let me ask you this, since Congress mandated that $2 billion worth of FFB loans need to be refinanced in 1988, you managed to come up with that figure to the cent. When we are talking about loans in the hundreds of millions of dollars, how did you manage to get the $2 billion exactly?

Answer: The Omnibus Budget Reconciliation Act of 1987 provides that ". . . any prepayment that would cause the total amount of such prepayments during the fiscal year 1988 to exceed $2,000,000,000 shall be subject solely to the approval of the Secretary of the Treasury." Anticipating that REA might receive applications in excess of the $2 billion, the implementing regulations (7 CFR 1786) established a procedure to proportionately prorate any applications that would cause prepayments during fiscal year 1988 to exceed the $2 billion. As a result, applications from two borrowers were prorated to achieve the $2 billion.

Question: You also indicate that the applications for prepayment which you did not allow, totalled approximately $5,260,000,000. What are you doing with these applications?

Answer: REA has received prepayment applications from non-priority borrowers totalling more than $5 billion. Prepayment applications, submitted in accordance with the regulations are being logged as received. A copy of the accompanying Notice of Intent to Prepay the Federal Financing Bank is being retained by REA and the remainder of the application is being returned to the applicant.

Question: Why are you returning the applications to the borrowers, instead of keeping them for further refinancings?

Answer: The Omnibus Budget Reconciliation Act of 1987 provides that ". . . any prepayment that would cause the total amount of such prepayments during the fiscal year 1988 to exceed $2,000,000,000 shall be subject solely to the approval of the Secretary of the Treasury." Since the Secretary of the Treasury has determined that prepayments in excess of $2 billion will not be approved, applications in excess of that amount are being returned to the applicants.

Question: If you were required--or because of some miracle your head cleared and you saw the wisdom of it--to allow further refinancings, wouldn't it be beneficial to have these applications on hand so that you could act quickly?

Answer: Applications for refinancing must contain timely information. Certain conditions of the borrower may change. REA will promptly implement a prepayment program and act on additional FFB refinancings should it become necessary to do so.

Question: Of the applications that have been submitted which you have not allowed, please rank them in priority as you would see it before refinancing if additional refinancings were allowed. Please state the priority that you give each application, and the reasons for the priority.

Answer: The authority of REA to approve prepayments under the provisions of the Omnibus Budget Reconciliation Act of 1987 expired when the full $2 billion in prepayments were received in February 1988. Because of the lack of prepayment authority and the complexity in determining a "ranking," REA has not prioritized the additional applications received.

Question: Now, also please list the applications as they were received chronologically by REA.

Answer: The Regulations do not differentiate between applications that are submitted on the same day. The applications will be listed in alphabetical order by the date the application was received. [The information follows:]

FFB PREPAYMENT APPLICATIONS
ELECTRIC AND TELEPHONE BORROWERS
ALPHABETICAL BY APPLICATION RECEIVED DATE

2-3-88		
1	Arizona Electric Power Cooperative, Inc. Benson, Arizona	$78,897,917.19
2	Big Rivers Electric Corporation Henderson, Kentucky	$49,979,738.56
3	Cajun Electric Power Cooperative, Inc. Baton Rouge, Louisiana	$139,784,331.84
2-5-88		
1	Soyland Power Cooperative, Inc. Decatur, Illinois	$43,205,868.90
2-29-88		
1	Allegheny Electric Cooperative Inc. Harrisburg, Pennsylvania	$68,275,831.13
2	ALLTEL Arkansas, Inc. Little Rock, Arkansas	$2,255,066.00
3	ALLTEL Carolina, Inc. Matthews, North Carolina	$9,012,000.00
4	ALLTEL Florida, Inc. Matthews, North Carolina	$13,801,416.55
5	ALLTEL Georgia, Inc. Matthews, North Carolina	$1,937,000.00
6	ALLTEL Mississippi, Inc. Matthews, North Carolina	$1,640,824.60

7	ALLTEL South Carolina, Inc. Matthews, North Carolina	$810,363.17
8	Associated Electric Cooperative, Inc. Springfield, Missouri	$491,578,323.03
9	Basin Electric Power Cooperative Bismarck, North Dakota	$240,814,166.73
10	Boone County Telephone Company (ALLTEL Arkansas) Little Rock, Arkansas	$2,291,728.00
11	Brookville Telephone Company Export, Pennsylvania	$4,365,555.07
12	Buckeye Power Inc. Columbus, Ohio	$34,456,357.00
13	Central Iowa Power Cooperative Cedar Rapids, Iowa	$53,936,288.16
14	Chugach Electric Association, Inc Anchorage, Alaska	$131,123,169.84
15	Commonwealth Telephone Company Dallas, Pennsylvania	$576,000.00
16	Cooperative Power Association Eden Prairie, Minnesota	$69,023,608.00
17	Dairyland Power Cooperative La Crosse, Wisconsin	$9,112,641.00
18	East Kentucky Power Cooperative, Inc. Winchester, Kentucky	$379,478,781.75
19	Elmore Coosa Telephone Company, Inc. Matthews, North Carolina	$626,969.89
20	Hoosier Energy Rural Electric Cooperative, Inc. Bloomington, Indiana	$238,505,814.00
21	North Carolina Electric Membership Corporation Raleigh, North Carolina	$138,570,000.00

22	Oglethorpe Power Corporation Tucker, Georgia	$728,055,001.16
23	Pacific Northwest Generating Company Portland, Oregon	$53,311,446.74
24	Plains Electric Generation and Transmission Cooperative, Inc. Albuquerque, New Mexico	$223,918,655.56
25	Quincy Telephone Company Quincy, Florida	$987,000.00
26	Runestone Telephone Association Hoffman, Minnesota	$680,633.48
27	Saluda River Electric Cooperative Inc. Laurens, South Carolina	$242,723,589.21
28	San Miguel Electric Cooperative, Inc. Jourdanton, Texas	$294,264,781.00
28	Seminole Electric Cooperative, Inc. Tampa, Florida	$329,090,346.00
30	Somerset Telephone Company North Anson, Maine	$195,203.83
31	South Mississippi Electric Power Association Hattiesburg, Mississippi	$428,785,262.64
32	Southern Illinois Power Cooperative Marion, Illinois	$52,970,537.30
33	Sugar Land Telephone Company Sugar Land, Texas	$15,068,867.00
34	Tennessee Telephone Company Knoxville, Tennessee	$3,601,373.45
35	The Murraysville Telephone Company Export, Pennsylvania	$390,993.87

36	Tri-State Generation & Transmission Association, Inc. Denver, Colorado	$205,949,930.79
37	United Power Association Elk River, Minnesota	$160,531,223.00
38	United Telequipment Corporation Monroe, Wisconsin	$1,247,401.72
39	Western Farmers Electric Cooperative Anadarko, Oklahoma	$284,458,106.50
3-1-88		
1	Sho-Me Power Corporation Marshfield, Missouri	$15,085,860.72
2	United Telephone Company of New Jersey, Inc. Carlisle, Pennsylvania	$1,698,273.13
3-4-88		
1	Corn Belt Power Cooperative Humboldt, Iowa	$14,032,471.99
3-30-88		
1	Alabama Electric Cooperative, Inc. Anadalusia, Alabama	$123,621,481.18
4-5-88		
1	Arkansas Electric Cooperative Corp. Little Rock, Arkansas	$122,810,830.86
	Total	$5,507,539,031.54

RURAL TELEPHONE BANK PRIVATIZATION

Question. In regard to your steps to achieve privatization in 1995, as I read the law, it says that the Class A Stock shall be redeemed and retired by the Telephone Bank, as soon as practicable "after" September 30, 1995. Therefore, aren't you proposing a violation of the law by achieving privatization in 1995?

Answer. The current statute provides for retirement to begin in 1995. We are not proposing to violate the current law but will submit legislation to amend Section 406(c). The proposed amendment will provide that "No Class A stock shall be issued after September 30, 1988, and fifty-one percent of the maximum amount of Class A stock outstanding at any time after September 30, 1985, shall be redeemed and retired by the telephone bank on September 30, 1995".

Question. Are you aware of the limitations with that retirement which will begin after fiscal year 1995?

Answer. The current law establishes a limitation on the minimum amount of Class A Stock that can be retired each year after said date. However, there is no limitation on the maximum amount.

Question. How much stock can be retired each year after that date?

Answer. There is no ceiling or maximum limitation imposed by law. However, the current statute stipulates that "the minimum amount of Class A Stock that shall be retired each year after said date shall equal the amount of Class B Stock sold by the telephone bank during such year."

PROPOSED LEGISLATION

Question. You are proposing significant legislative changes in the REA program including repeal of certain laws that were just enacted. Aren't you aware that this committee does not have jurisdiction to make legislative changes like this?

Answer: The legislative changes that are being proposed are a key element in our overall fiscal year 1989 budget request. This proposal presented here today will prevent the insolvency of the Revolving Fund while being consistent with the Bipartisan Budget Agreement and the overall budgetary need to meet Gramm-Rudman-Hollings deficit reduction targets. Therefore, we felt that it was important to include them in our presentation to this committee. We recognize that upon submission to the Congress that the legislative proposals will be considered by other committees in addition to this committee.

Question. Why do you bring these proposals to us, especially when they were enacted only three short months ago?

Answer: The two sections of OBRA that you refer to will expand the scope of the RE Act to include greater rural development activities from the revolving fund.

The Administration strongly supports market-based economic development in rural areas and has included a package of initiatives in the fiscal year 1989 Budget for this purpose administered by the Farmers Home Administration.

REA borrowers have received heavily subsidized low-interest loans for the purpose of providing electric and telephone service to rural areas. This goal is largely accomplished and if borrowers are encouraged to invest in non-RE Act businesses, they will in effect be using taxpayer subsidies for new purposes that could include restaurants, resorts, hotels, etc., that go well beyond the scope of the Act. This would also duplicate other USDA rural development programs.

REA's borrowers have considerable competence and expertise in planning and operating electric and telephone utility businesses. Basically, utilities are regulated and function as monopolies in their service areas. Most have no direct competitors and very little experience in the high-risk area of starting new business ventures.

We are also concerned about the adverse impact of the failure rate of economic development ventures. About 55 percent of all new ventures started in the United States fail in the first 5 years. Such failures would adversely affect REA borrower capability to repay the $34 billion in REA direct and guaranteed loan debt. For these reasons, we are strongly opposed to REA borrowers entering into non-RE Act businesses and to REA having any responsibility in this area, which goes well beyond RE Act purposes.

COST TO BORROWERS

Question: You indicate in your testimony that the cost to borrowers of your proposal would only be 74 cents per month. Is this for electric and telephone borrowers?

Answer: This is the estimated increase that would be experienced by consumers of electric distribution borrowers.

Question: If so, what is the breakdown?

Answer: The cost increase has been determined for REA's electric distribution borrowers.

Question: Have you taken into consideration the times-interest-earned ratio that co-ops would have to maintain? I understand that if the interest rate goes up, borrowers will have to double the increase in their rates in order to compensate for the interest increase so that they can maintain the TIER ratio. Have you taken this into consideration in coming up with your cost analysis?

Answer: If an electric borrower has to pay a higher interest rate on a new loan there is very little impact on rates charged to the borrower's customers. Our analysis shows that an average REA electric distribution borrower relying on a 70 percent REA guarantee of a private sector loan would receive an interest rate of about 9.5 percent. This would result in rates charged to the borrower's customers rising less than 1 percent or 74 cents per month.

GENERAL

Question: You indicate in your testimony that the percentage of telephone subscribers receiving one-party services, increased by more than 31 percent over the last six years. What is the actual percentage of subscribers who have one-party service?

Answer: Approximately 91.8 percent of the subscribers served by REA borrowers have one-party service.

Question: Please break that down for both REA borrowers and non-REA borrowers.

Answer: We do not have statistics for non-REA financed companies.

REIMBURSEMENTS

Question: For fiscal years 1986 and 1987, please show the amount of loan defaults which have occurred in both of the electric and telephone programs, insured and guaranteed.

Answer: The telephone program does not have any loan defaults. In fiscal year 1986, the insured electric program had net defaults of $4 million and the guaranteed electric program was $163.6 million. For fiscal year 1987 insured electric net defaults were $5.7 million and guaranteed electric was $242.2 million.

Question: Of the amounts listed, what amount has the Rural Electrification Telephone Revolving Fund been required to pay to the Federal Financing Bank and other lenders?

Answer: The Rural Electrification and Telephone Revolving Fund was required to pay $163.6 million in fiscal year 1986 and $242.2 million in fiscal year 1987 to the Federal Financing Bank.

Question: Please show the current status of the Revolving Fund as well as the status of the past three years.

Answer: The information will be provided for the record.
[The information follows:]

Statement of Financial Condition, RETRF
for Fiscal Years 1984 through 1987
(in millions of dollars)

Assets	9/30/84	9/30/85	9/30/86	9/30/87
Cash	$ 2.8	$ 1.3	$ .6	$ (4.3)
Interest Receivable	58.2	359.1	509.0	792.0
Loans Receivable	34,286.8	35,636.1	35,939.0	35,272.6
Allowance for Losses	(31.8)	(418.6)	(420.9)	(637.9)
Total Assets	$34,316.0	$35,577.9	$36,027.7	$35,422.4

Liabilities				
CBOs	$ 3,536.7	$ 3,724.3	$ 4,241.2	$ 4,241.2
Loans Payable to U.S. Treasury	7,864.7	7,864.7	7,864.7	7,864.7
Borrowings from FFB	20,587.0	21,675.0	21,444.9	21,196.4
Miscellaneous Payables	-0-	53.3	.5	.6
Total Liabilities	$31,988.4	$33,317.4	$33,551.3	$33,303.0
Equity	$ 2,327.6	$ 2,260.5	$ 2,476.4	$ 2,119.4
Total Liabilities and Equity	$34,316.0	$35,577.9	$36,027.7	$35,422.4

Notes:

1. Pursuant to OMB Circular 87-7, FFB related loans were included as part of REA loan program beginning with fiscal year 1987. Fiscal years 1984 through 1986 have been restated for comparability.

2. Totals may not add due to rounding.

RURAL TELEPHONE BANK

Question: The budget that you submitted proposes to continue the Rural Telephone Bank Loans at the current level; however, you indicate the bank proposes to take other necessary steps to achieve privatization in 1995. What are the other necessary steps that will be taken?

Answer: At this time, we are developing a more detailed plan to achieve privatization of the Rural Telephone Bank.

Question: Will any of these steps be taken in fiscal year 1989?

Answer: At this time, we are requesting items specified in the budget under proposed legislation. These include the repeal of Sections 1411, 1412 and 1413 of the 1987 Omnibus Budget Reconciliation Act for the following reasons:

Section 1411 contains an interest-rate setting formula which has the effect of reducing the RTB long-term interest rate from 7.2 percent to about 5 percent. This rate reduction cannot be justified and prevents privatization of the RTB.

Section 1412 requires that the Treasury's cost-of-borrowing rate would be used to determine an applicant's eligibility for a Rural Telephone Bank loan. This provision has the immediate effect of moving very financially healthy telephone borrowers from the RTB to the Revolving Fund.

Section 1413 requires establishment of a reserve for Bank losses due to interest rate fluctuations and the disallowance of any other reserves. This provision does not allow the Bank to accumulate the necessary adequate reserves to initiate privatization starting in 1995. The Bank must be financially worthy in the private credit market in order to borrow funds from private lenders.

Question: Please provide the specifics on the steps taken and when you expect to take them. Will any legislation be required in order to take these steps?

Answer: The necessary legislative changes will be transmitted to Congress in the near future.

QUESTIONS SUBMITTED BY SENATOR COCHRAN

WORK-OUT TEAM

Question: Mr. Hunter, I understand you have put together a team that is working to improve the financial situation of REA's most financially troubled borrowers. What is the makeup of this team? Would you please elaborate on this initiative for this committee?

Answer: The team members represent a broad spectrum of experience and skills. The team leader has 30 years experience in matters relating to rural electrification, including engineering and finance. His assistant, who has over 20 years experience in rural electrification, has a degree in electrical engineering and an MBA in finance. Additionally, there are five analysts on the team who have demonstrated advanced analytical skills and a good business background. One has 10 years experience in work-outs with another Federal agency.

Team efforts to date have resulted in two work-out agreements being signed by the Government. The indebtedness to the Government in these two work-outs exceeds $2 billion. As a result of each work-out, the respective borrower now appears to be a viable organization which can continue service to its members. It is now anticipated that the Government will receive full repayment of principal and interest on the indebtedness of these two borrowers.

BUDGET REFORMS

Question: Mr. Hunter, REA is a successful program. It has helped bring reasonably priced electric and telephone service to practically every corner of the United States. Why do you believe REA requires the reforms suggested in your budget package and what would be the effect of these reforms on REA-borrowers and consumers?

Answer: The original purpose of the RE Act has been achieved. Ninety-nine percent of all U.S. farms have electricity and approximately 96 percent have telephone service. For the latter, this rate is actually higher than for urban and suburban areas. In addition, reforms are necessary because REA borrowers are financially sound and should be encouraged to satisfy their credit needs from private-sector financial organizations consistent with the general policies of the RE Act.

A partial loan guarantee of 70 percent would cost the borrower approximately 9.5 percent in interest expense. An increase in the borrower's total annual interest cost would require about a 0.7 percent increase in the monthly bill to the average customer, or only 74 cents per month. It is important to note that a borrower's interest expense is only about 5 percent of the total operating revenue. Therefore, a higher interest rate will have a relatively minor impact upon the borrower and also minimal impact upon the consumer. These reforms are necessary to ensure the solvency of the Revolving Fund and to help meet Gramm-Rudman-Hollings defict reduction targets.

PRIVATE FUNDING

Question: REA statistics cite an 11 percent growth in telephone borrowers net worth from 1984 to 1986. However, REA borrowers net worth, at 31.4 percent is still far short of the 45-60 percent necessary to obtain commercial financing and short of the 42 percent debt to equity ratio for the Bell Operating companies. What is REA doing to help borrowers improve their net worth?

Answer: REA encourages and recommends that borrowers increase their net worth. The 31.4 percent figure is an average of all borrowers. Many of our borrowers have significantly higher net worths. Also, there is little doubt that they can borrow privately even with a 23 percent equity level. However, REA has been restricted by the annual appropriation acts from considering the amount of cash, liquid assets, and other general funds a borrower has in determining its needs for financing and its eligibility for a loan or advance of funds. Many of our borrowers have substantial amounts of general funds; but they choose to use these funds to pay dividends or patronage refunds or for investment in other enterprises, partly because they can borrow from the taxpayer at low, heavily subsidized interest rates. This is not helpful to improving the net worth of REA telephone borrowers.

RURAL TELEPHONE BANK

Question. In 1971, Congress established the Rural Telephone Bank (RTB) to provide an assured and viable source of supplementary financing for the purpose of extending telephone service to rural America. The Administration's budget requires the RTB to take necessary steps to achieve privatization by 1995. This is in direct conflict with RTB authorization in the RE Act. The law states that "Class A" stock will be redeemed and retired by the telephone bank as soon as practicable after September 30, 1995.

Since the law so clearly states that the RTB stock be retired after 1995, why does your budget propose completing retirement by 1995 when this is in direct conflict with the law.

any studies on the effects of regulatory actions, such as increases in subscriber line charges and regulator's movement away from traditional settlements and division of revenues?

Answer: REA has not made a specific study of this, but staff has day-to-day contact with the industry and are continually monitoring the situation. The FCC is monitoring the effects of deregulation and recently found that since 1983 the percentage of households with telephone service nationwide increased from 91.4 percent to 92.5 percent. In the same time period, long distance rates decreased about 30 percent while REA borrower toll revenues increased 22 percent. To date it appears that deregulation has not had an adverse effect on rural telephone systems or their subscribers, and it may have had a favorable effect.

Question: What is the impact of changing technology in telecommunications on the REA program? Please explain Open Network Architecture and Signal System 7 and how this impacts the needs of REA borrowers in the future.

Answer: The most significant emerging change in technology in telecommunications is Integrated Services Digital Network or ISDN. ISDN encompases many new and emerging developments such as Signalling System Seven (SS7) and Open Network Architecture (ONA). ISDN is a telecommunications network capable of carrying just about any service imaginable. SS7 controls how services are carried and distributed by the network. ONA provides the standards necessary to access the network. The first phase of ISDN is getting the network in place. The interexchange carriers are well underway in building their part of the network especially on major inter-city routes. Standards for ONA and SS7 are still in development. Many of the services to be offered via ISDN are in the conceptual stage. REA is prepared to work with borrowers to design their systems to be compatible with ISDN. The large number of digital switches installed by REA borrowers is the first step in ensuring this compatibility. However, the major potential of ISDN is in unregulated services, which are outside the scope of RE Act financing.

Question: REA says that total operating revenues for telephone borrowers increased from $2 billion to $3.2 billion (60 percent) from 1981 to 1986. Yet the independent telephone companies as a whole experienced an increase in total operating revenues of 288 percent from 1980-1986 (FCC numbers). Isn't it misleading of REA to suggest that the rural telcos are doing well when in fact their positions relative to that of other independent telcos have eroded over the past 7 years?

Answer: Operating revenues for REA borrowers and all independent telephone companies have increased at comparable rates since 1980. According to data compiled by the United States Telephone Association, independent telephone companies had operating revenues totalling $10.475 billion in 1980 and $18.469 billion in 1986, a 76 percent increase. Over the same period, operating revenues for REA borrowers increased 81 percent, Answer. The current statute provides for retirement to begin in 1995. We are not proposing to violate the current law but will submit legislation to amend Section 406(c). The proposed amendment will provide that "No Class A stock shall be issued after September 30, 1988 and fifty-one percent of the maximum amount of Class A stock outstanding at any time after September 30, 1985, shall be redeemed and retired by the telephone bank on September 30, 1995."

GUARANTEED LOAN PROGRAM

Question: This budget proposes caps on the amount of electric and telephone loans available under the new 70 percent guarantee program. REA will only guarantee up to $100 million in telephone loans and $1.3 billion in electric loans. What was the total demand REA received last year for the direct loan programs?

Answer: In fiscal year 1987, REA approved $229,787,000 in direct telepone loans. This represented approval of all of the loan applications that were completed and ready for obligation. An additional $38.8 million of loan applications were in various stages of processing but not complete.

REA also approved $628,390,000 in direct electric loans. An additional $172 million of loan applications were carried over and considered for funding from the 1988 budget.

Question: Has REA or any other agency conducted research to determine the impact of this proposal on telephone and electric service in rural areas?

Answer: REA did not engage in any specific research. Our internal analysis which utilized the operating records of our borrowers and the willingness of the financial markets to provide funds with government guarantees has given us the basis for the fiscal year 1989 budget request. The impact of this proposal is a very small increase in interest costs and should not affect telephone and electric service in rural areas.

Question: In light of the uncertain financial welfare of these systems and the need and demand for low-interest rate loans, how can you justify these caps?

Answer: We believe the rural utility systems are financially strong. After 50 years, they have reached a degree of financial stability, permitting them to continue operations without reliance on heavily subsidized interest rates. Instead, they can use REA partial loan guarantees, which carry a lower subsidy cost. It is important that all segments of the population share in the goal of reducing the federal deficit.

TELECOMMUNICATIONS INDUSTRY

Question: Telecommunications is a new deregulated industry with many technological changes being introduced. Has REA done from $1.758 billion to $3.181 billion. The financial health of the REA's telephone borrowers has improved dramatically in the last 6 years.

In addition, many telephone borrowers are subsidiaries of well-to-do holding companies with gross annual revenues in excess of $100 million. These subsidiaries accounted for almost 26 percent of all telephone loans from 1980 through 1985.

QUESTIONS SUBMITTED BY SENATOR SPECTER

PRIVATE FUNDING

Question: The Administration's fiscal year 1989 budget proposal includes provisions to reduce the Rural Electrification Administration (REA) loan guarantees for generation and transmission cooperatives from 100 percent to 80 percent and for distribution cooperatives from 100 percent to 70 percent. Further, REA would be denied access to the Federal Financing Bank (FFB). In this context, please provide answers to the following:

How many basis points will these changes add to the cost of rural electric financing?

Answer: Currently, electric distribution borrowers generally secure 70 percent of their needs from REA and 30 percent from a supplemental lender. Using those ratios, the effective interest cost, including equity investment, amounts to around 6.3 percent. We expect borrowers to be able to receive financing with a 70 percent REA guarantee at around 9.5 percent, an increase of 320 basis points. However, borrower interest costs are only 5 percent or a small part of providing service.

Question: By what amount will these additional costs increase the electric bills of rural electric cooperative consumers?

Answer: The proposed REA partial guarantees (70 percent for distribution and telephone and 80 percent for power supply) of privately originated loans would have a negligible impact on the rural electric cooperative consumers. For example, one could expect that in 5 years, a monthly bill for a typical electric distribution consumer would increase by only 74 cents.

Question: To what extent would the REA be able to attract private capital to compensate for the loss of access to the FFB capital pools?

Answer: Nearly all REA borrowers can secure loans from private lenders at reasonable rates with partial REA guarantees. This is evidenced by the current private financing by REA borrowers. Many have obtained private loans. Currently, REA electric borrowers' non-guarantee private debt exceeds $8.6 billion. This includes financing by the National Rural

Utilities Cooperative Finance Corporation (CFC) that began lending in 1971 and currently has lent over $3.4 billion to REA borrowers.

A number of REA borrowers have well-established private sector borrowing credentials, including solid debt service ratings by Standard and Poors and Moody's. A listing of these borrowers will be provided for the record. [The information follows:]

Private Financing Experience and Recent Debt Ratings of Selected REA Power Supply Borrowers

Borrower ID	Borrower Name	Long-term FFB Debt ($ in M)	Private Debt Without REA Guarantee ($ in M)	Total Outstanding Debt 1/ ($ in M)	Private Debt as Percent of Total Debt	Primary Sources of Private Debt 2/	Recent Debt Rating 3/
OH99	Buckeye Po. Inc.	56.0	313.0	414.7	75.5	BC,IDB's,Mrtg Bonds,PCB	Aa3(M)/AA(S)
CO46	Colorado-Ute Elec. Ass.	399.1	662.9	1,191.0	55.7	CFC,PCB	A1(M)/A(S)
FL41	Seminole Elec. Coop.	578.4	578.4	1,075.6	53.8	CFC,NCSC Col Bank,PCB	A1(M)/A(S)
IN106	Hoosier Elec. Coop.	400.5	400.5	874.2	45.8	BC,Irving Trust,PCB	A(M)
ND45	Basin Elec. Po. Coop.	1055.1	915.8	2,442.5	37.5	BC,PCB	A1(M)/A(S)
IA83	Cent. Iowa Po. Coop.	62.5	77.6	219.4	35.4	CFC,PCB	NA
GA109	Oglethorpe Po. COrp.	2734.9	1,491.4	4,246.9	35.1	Col Bank,Citibank,PCB	A1(M)/P1(S)
MO73	Associated Elec. Coop.	623.8	354.2	1,069.3	33.1	CFC	A2(M)
KY59	East Kentucky Po. Coop.	501.8	284.5	909.0	31.3	CFC,Insurance Cos,PCB	NA
KS53	Sunflower Elec. Coop.	411.8	144.3	591.5	24.4	BC,PCB	NA
NM18	Plains Elec. G&T Coop.	370.1	93.0	489.0	19.0	PCB	NA
KS54	Kansas Elec. Po. Coop.	194.5	43.5	238.0	18.3	PCB	NA
TX155	San Miguel Elec. Coop.	375.4	78.2	453.6	17.2	PCB	NA
IA84	Corn Belt Po. Coop.	52.4	22.4	130.4	17.2	CFC,PCB	4A-2(D)
OR42	Pacific N.W. Generating Co.	53.7	9.7	63.5	15.3	PCB	NA
CO47	Tri-State G&T Ass.	556.2	106.4	739.7	14.4	PCB	A3&Baa(M)
NC67	N.C. Elec. Memb. Corp.	1187.7	197.5	1,393.6	14.2	Duke Power, PCB	NA
AR34	Arkansas Elec. Coop.	350.8	60.4	447.9	13.5	PCB	A1(M)/P1(S)
AL42	Alabama Elec. Coop.	271.42	48.8	400.0	12.2	CFC	NA
MS53	So. Miss. Elec. Po. Ass.	607.2	89.1	756.1	11.8	BC,PCB	NA
MN107	United Po. Ass.	534.4	84.0	722.2	11.6	PCB	NA
SC51	Saluda River Elec. Coop.	418.8	51.9	470.7	11.0	Duke Power,PCB	NA
MN106	Coop. Po. Ass.	564	73.4	713.5	10.3	CFC,PCB	NA
OK32	West. Farmers Elec. Coop.	452.6	59.9	600.3	10.0	CFC,Wichita Bank	NA
PA27	Allegheny Elec. Coop.	498.1	30.8	529.3	5.8	CFC,PCB	Aaa(M)
TOTAL		13,312.0	6,271.6	21,183.9	29.6		

1/ Includes REA debt, REA guaranteed FFB debt, REA guaranteed private debt, and non-REA guaranteed private debt.

2/ BC (Bank for Cooperatives), CFC (Cooperative Finance Corporation), and PCB (pollution control bonds).

3/ M (Moody's), S (Standard and Poors), and D (Dunn and Bradstreet). NA indicates either not applicable or not available.

SUBCOMMITTEE RECESS

Senator **Burdick**. This ends today's hearing. Our next hearings will be held on Wednesday, April 13, in this same room. At that time, we will hear from the representatives of the Farmers Home Administration, the Federal Crop Insurance Corporation, and the Farm Credit System Assistance Board. Until that time, the subcommittee stands in recess.

[Whereupon, at 11 a.m., Wednesday, March 30, the subcommittee was recessed, to reconvene at 10 a.m., Wednesday, April 13.]

AGRICULTURE, RURAL DEVELOPMENT, AND RELATED AGENCIES APPROPRIATIONS FOR FISCAL YEAR 1989

WEDNESDAY, APRIL 13, 1988

U.S. SENATE,
SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS,
Washington, DC.

The subcommittee met at 9:59 a.m. in room SD–138 Dirksen Senate Office Building, Hon. Quentin N. Burdick (chairman) presiding.

Present: Senators Burdick, Sasser, Cochran, and Grassley.

DEPARTMENT OF AGRICULTURE

FARMERS HOME ADMINISTRATION

STATEMENTS OF:

ROLAND R. VAUTOUR, UNDER SECRETARY FOR SMALL COMMUNITY AND RURAL DEVELOPMENT, DEPARTMENT OF AGRICULTURE

VANCE L. CLARK, ADMINISTRATOR, FARMERS HOME ADMINISTRATION

ACCOMPANIED BY STEPHEN B. DEWHURST, BUDGET OFFICER, DEPARTMENT OF AGRICULTURE

OPENING REMARKS

Senator BURDICK. Good morning, ladies and gentlemen. Today, we continue our hearings on the fiscal year 1989 budget for agencies under the Agricultural Appropriations Subcommittee. Today, we will hear from three different agencies. With us is Roland Vautour, Under Secretary for Small Community and Rural Development at USDA; Mr. Vance Clark, the Administrator for the Farmers Home Administration; John Marshall, the Manager of the Federal Crop Insurance Corporation; and Steve Dewhurst, the Budget Officer for USDA.

Also, for the first time, we have the Farm Credit System Assistance Board, which will be represented by Mr. Eric Thor, who is President and Chief Executive Officer. I have asked all three agencies to sit at the table simultaneously, so members can ask questions of any of the agency representatives while they are here. I will leave the summary of your budgets to you and remind you that your full statements will be made a part of the record.

STATEMENT OF ROLAND R. VAUTOUR

Mr. VAUTOUR. Good morning, Mr. Chairman and members of the committee. We appreciate this opportunity to be with you today to discuss the Farmers Home Administration budget for the 1989 fiscal year. This budget meets the Administration's continuing commitment to those members of the American agricultural community unable to obtain needed credit through regular commercial lenders. It also recognizes the stress that rural America has been experiencing in recent years in trying to keep vital public services healthy and includes some financial assistance to help revitalize those services.

Throughout its history, the Farmers Home Administration has been called upon to meet changing conditions and to adapt its resources, both staff and financial, to meet those conditions. The 1989 budget continues that process.

The Agency closed out the 1987 fiscal year with an outstanding portfolio in excess of 1.6 million loans of about $65 billion in farm, rural housing and community programs. This includes $3.7 billion in guaranteed loans.

A volume of activity that large is not without problems. About $7 billion of the outstanding portfolio is delinquent. We are managing this portfolio in a diligent and fair manner. We are currently devoting all resources at the federal level to implementing the provisions of the Agricultural Credit Act of 1987, and we plan to have those regulations in the field by early June.

In fiscal year 1987, principal repayments totaled $4.5 billion, and interest payments amounted to $2.8 billion. This $7.3 billion in collections represents about $2 billion more than was made in loans and grants.

Our efforts will include the resumption of a practice discontinued in 1985, when new regulations were published concerning servicing options that are available to farm borrowers. We will be making loans in some cases to farmers who can repay principal and interest on this year's crop loan but who cannot bring their existing loans current.

For the 1989 fiscal year, the Farmers Home budget will permit the continued expansion of the guaranteed farm lending program and provide for the continuation of the interest rate buy-down program.

The budget also provides funding for rural development programs. Although these programs have a modest reduction from the 1988 levels, it nevertheless expresses the Administration's commitment to helping those rural communities that have experienced economic hardships resulting from the dropoff in farming.

This direct financial assistance, along with advice and technical assistance the Administration has already committed from existing resources, will enable those communities to strengthen their basic service structure. The Administration has already put in place:

A rural information service sharing resources of the Extension Service and the National Agricultural Library; Rural Enterprise Teams organized under the leadership of the Food and Agriculture Councils in the states; expanded research on rural development in several USDA Agencies; the process of developing regulations to redirect FmHA business and industry guaranteed loans to those communities most in need; increased Extension Service resources directed to economic development.

This combined effort is being directed from the Office of the Deputy Secretary, and we believe this budget will add significantly to those beginnings.

Mr. Chairman, the budget meets the basic needs of rural America while recognizing the fundamentals of sound fiscal policy. Again, Mr. Clark and I are happy to meet with you, Mr. Chairman, and the subcommittee, to discuss the FmHA proposed budget. Mr. Clark has a prepared statement to discuss the budget in more detail, and we will be available to answer any questions you may have.

Thank you.

Senator BURDICK. All right, Mr. Clark, we will hear from you next.

STATEMENT OF VANCE L. CLARK

Mr. CLARK. Thank you, Mr. Chairman. Since you do have my prepared testimony, I will try to keep my comments brief.

Hopefully, you are aware of our continuing efforts to assist the thousands of farmers in this country as well as their rural neighbors as they look to us for credit. Last year, 1987, we evidenced credit to more than 260,000 farmers and over 1 million of their rural American neighbors as we closed out the fiscal year with a portfolio of more than 1.6 million farm, housing, and community program loans totaling about $65 billion.

Last year, we again did everything that we could to assist our farm borrowers, and the documented results seem to say we did well. We provided servicing assistance last year to almost 79,000 of our borrowers, allowing some 32,000 of them to reschedule or reamortize their loans, 1,250 to defer their loans, and over 29,500 subordinations to other lenders that would allow additional credit to be evidenced and extended by the private sector. Over 16,400 of our loans were also refinanced at more favorable limited interest rates, with 64 percent of our direct operating and ownership loans provided at that bargain rate.

Our average limited resource interest of 5 percent for farm ownership loans and 5.25 percent for operating loans was a real bargain.

Last year, our Operation Assist program, an in-house program requiring FmHA county office personnel to take an aggressive role in securing guaranteed loans for farmers in the private sector, provided 1,548 borrowers with guaranteed loans totaling $127 million, compared to 546 loans for $43 million in fiscal year 1986.

The interest buy-down program is now in its third year. Last year, over 3,200 buy-down loans were approved totaling $374 million in loans and $22 million in interest subsidies.

We continue to provide lease back/buy back opportunities to our borrowers. Last year, we had 276 leases in effect under the program where a former owner or operator is given first choice at buying back the farm or leasing it back with an option to buy. Purchases under this program totaled 108.

Homestead retention was also in effect, but not a great number of our borrowers took advantage of that program. In 1987 we rented only 49 homesteads to former farm owners, about the same number as provided in 1986.

The provisions of the Food Security Act of 1985 were rather strict as to eligibility for these programs. The Agricultural Credit Act of 1987 changed those requirements substantially in favor of the farm borrower. We think we are going to see more activity in the Leaseback and Homestead Retention programs because of liberalization of those requirements.

FMHA CONTINUATION POLICY

We have many new tools available to us for 1988, some of which are already in the field and are operational. One of them is a continuation policy that provides new crop loans for delinquent farm borrowers unable to cash flow their entire debt, allowing them to finance their current crop expenses if other creditors will stand by.

An amendment to the 1987 supplemental appropriations bill resurrected that practice. Our new forms of assistance for this year include debt restructuring and debt write-down, authorized by the Agricultural Credit Act of 1987. These options will be available as soon as we complete the difficult task of writing regulations.

Once again, Mr. Chairman, I remind you and all members of the committee that despite the new tools that have been provided to us through the Agricultural Credit Act of 1987, we cannot save every distressed American farmer. That is just impossible, but again, we will try. Many of our borrowers can benefit through restructuring of their loans, and we will assist them in doing so.

Yet all of us must realize that not everyone who applies will have the same positive result. Unfortunately, almost $7 billion of our $26 billion farm portfolio is in arrears.

All of us must realize that much of that amount is probably uncollectible. However, we are going to continue to attempt to help, and we are going to continue to work with all borrowers who show some promise of succeeding.

ACIF AND RDIF FUNDING REQUESTS

If there is the slightest chance, we are there ready to help. To carry out that commitment of assistance, we are requesting $4.2 billion for the Agricultural Credit Insurance Fund [ACIF] out of a total program budget request of $5 billion as we continue in our attempts to move from direct to guaranteed loans.

Our request includes $500 million for direct operating loans and $3.5 billion for guaranteed operating loans together with $100 million for guaranteed ownership loans and $100 million for emergency loans. We are requesting $395.7 million for the Rural Development Insurance Fund, including $250 million for the water and waste disposal loans, $95.7 million for business and industry loan guarantees, and $50 million for community facility loans.

These loan programs, plus $75 million requested for water and waste disposal grants, constitute the basic rural development funding designed to help small communities rebuild their essential public service facilities.

HOUSING VOUCHER PROGRAM

Once again, we are requesting $381.6 million in funding to establish a housing voucher program similar to HUD's existing program in rural areas. Under this program, vouchers for some 21,000 units of housing will be provided to low-income, rural residents.

REIMBURSEMENT FOR LOSSES

Unfortunately, we need also to recognize the losses that are in our loan portfolio. We are, therefore, asking for $3.5 billion for the Agricultural Credit Insurance Fund and $1.6 billion for the Rural Development Insurance Fund to cover interest subsidies and losses.

SALARIES AND EXPENSES

In the Rural Housing Insurance Fund, we are asking for $3.7 billion for interest subsidies and other losses and $204 million for rental assistance. Of course, Mr. Chairman, it takes human resources to accomplish all these things. We are requesting an appropriation of $420 million for salaries and expenses which will support a staff-year level of 11,700 in our agency, a reduction of 975 staff-years related to the termination and reduction of new loan authority in FmHA programs.

AUTOMATION IN FMHA

We have experienced great success in the automation of the Farmers Home Administration. Last year we completed initial installation of automated equipment at all levels of our agency. Our new computerized equipment is beginning to pay off, and it appears now that we are about to catch up to the private sector in efficiency through automation. I feel we are truly emerging from the dark ages in that respect.

We think, Mr. Chairman, that our 1989 budget request meets the most basic needs of rural America. It is presented here today in the spirit of the Budget Committee Summit concluded last December.

BRIEF HISTORY OF FMHA

We are submitting our annual brief history of the agency which will provide you and the members with much more information on the level of assistance provided to rural America by Farmers Home Administration over our 52-year history.

This, then, concludes my remarks, Mr. Chairman. I will be happy to join the Under Secretary in responding to your questions.

Senator BURDICK. Thank you.

[The statement Vance L. Clark and a brief history of FmHA follow:]

STATEMENT OF VANCE L. CLARK

Mr. Chairman and Members of the Committee, the Under Secretary and I do, indeed, appreciate this opportunity to discuss our 1989 fiscal year budget request, and this opportunity to report to you on our continuing efforts to assist those farmers and their neighbors unable to meet their credit needs through regular commercial sources.

In 1987, once again, the Farmers Home Administration was the largest single source of credit for more than 260,000 farmers and almost a million of their neighboring families in the Nation's smaller communities. We closed out the 1987 fiscal year with a total outstanding portfolio of more than 1.6 million farm, housing and community program loans totaling about $65 billion, including $3.7 billion in guaranteed loans. And, once again, we devoted our best efforts to helping those farmers, many of whom were encountering difficulty through circumstances beyond their control, continue their operations.

Servicing Actions

As evidence of our best efforts -- last year, special servicing assistance was extended to our farm borrowers in almost 79,000 instances. This included almost 32,000 loans rescheduled or reamortized, 1,250 loans deferred, 29,500 subordinated to other lenders to allow new credit to be extended by the private sector, and 16,400 loans refinanced at the more favorable limited resource interest rates.

On a dollar and number of loans basis, 64 percent of our direct operating and ownership loans were at the limited resource rates. Overall, this special servicing relief included more than one in every three of our farm borrowers. At an average limited resource interest rate of 5 percent for farm ownership loans and 5.25 for operating loans, that was real relief.

We have some important new tools to help us keep those viable farmers in operation this year -- which I will discuss in a moment. But there were some other actions we took last year that were just as important to our borrowers' success. They included:

1. Operation Assist. A practice, developed in FmHA, that requires county office personnel to take an active role in securing guarantees for

farmers who otherwise might not obtain credit. It is now in its third year. Last year, we almost tripled the level of assistance provided this way, through 1,548 loans guaranteed totaling $127 million, compared to 546 loans for $43 million in fiscal year 1986. This activity already is underway this year.

2. Interest Buy-down. This program, also in its third year, continues to grow in popularity with borrowers and lenders. Last year, over 3,200 buy-downs were approved for $374 million in loans and $22 million in subsidies paid to lenders. In 1986, buy-downs totaled 1,650 for $176 million in loans and $10 million in subsidies.

3. Lease back/buy back. As of the end of the 1987 fiscal year, we had 276 leases in effect under the program where a former owner or operator is given first choice at buying back the farm or leasing it back with an option to buy. Purchases under this program totaled 108.

4. Homestead Retention. In the last fiscal year, 49 homesteads were rented to the former owners of farms where their loans were liquidated, about the same number as the year before.

As you know, the provisions in the Food Security Act of 1985 that authorized the last two programs included fairly strict eligibility requirements, especially for homestead retention. Those requirements were changed substantially, in favor of the farm borrower, by the Agricultural Credit Act of 1987, and applications for those options, we think, will increase.

As I mentioned, we have new ways to help our borrowers this year. And one of them is the amendment to the supplemental appropriations bill last July concerning new crop loans for our delinquent farm borrowers.

Final regulations concerning the amendment have been published for implementation by our field offices. The assistance that can be provided by the amendment is available as one of our servicing considerations.

Other forms of assistance, such as debt restructuring authorized by the Agricultural Credit Act of 1987, will be available as soon as we complete production of the regulations. Preparation of those regulations was an enormous undertaking, and changes will be widespread, both for our borrowers and our field staff. Nevertheless, we expect to meet all of the Congressional mandates for activating the various provisions relating to FmHA.

Mr. Chairman, in spite of all the steps we have taken and those that will be available to us in the future, it would be unrealistic to say that every farmer who has a loan with us or every person who wants a loan from us will be successful. As I have said to you before -- we just cannot save every distressed American farmer.

Request For Farm Loans

For example, we know that many of our farm borrowers will have their loans restructured so they can continue. But we also know that not every one who applies will have the same positive result. Almost $7 billion of the $26 billion held by our active farm loan borrowers is in arrears. Much of that probably is uncollectible. Still, we will continue our efforts to help those farmers who show promise of succeeding. If there is the slightest chance, we are there ready to help.

To help us in those efforts, we are requesting $4.2 billion for the Agricultural Credit Insurance Fund -- out of a total program budget request of $5 billion. This would allow us to continue the transition from direct to guaranteed loans in keeping with the course set forth in the Food Security Act of 1985.

Under this request, the program levels would be $500 million for direct operating loans, $3.5 billion for guaranteed operating loans, $100 million for guaranteed ownership loans, and $100 million for emergency loans.

Request For Rural Development Loans

We are requesting $395.7 million for the Rural Development Insurance Fund. This total includes $250 million for the water and waste disposal loans, $95.7 million for business and industry loan guarantees, and $50 million for community facility loans.

These loan programs, plus $75 million requested for water and waste disposal grants, constitute the basic rural development funding designed to help small communities rebuild their essential public service facilities. This funding also is an expression of the Administration's commitment to help those communities whose service structure has weakened under the pressure of the farm economy's problems.

Housing Voucher Program

We are requesting $381.6 million to establish a housing voucher program in rural areas similar to HUD's program. Under this program, vouchers providing 21,200 units of housing will be offered to low-income residents. This would be comparable to the existing rental assistance program in the number of units to be made available.

Reimbursement for Losses

To reimburse the revolving funds, we are asking for $3,467,596,000 for the Agricultural Credit Insurance Fund and $1,607,047,000 for the Rural Development Insurance Fund to cover interest subsidies and other losses.

In the Rural Housing Insurance Fund, we are requesting $3,660,061,000 for interest subsidies and other losses and $204,428,000 for rental assistance.

Salaries and Expenses

For salaries and expenses, we are requesting an appropriation of $420 million. This will support a staff year level of 11,700, a reduction of 975 staff years related to the termination and reduction of new loan authority in FmHA programs. This level of staffing will allow us to maintain the high level of borrower counseling needed to maintain and improve the quality of the farm loan and community loan portfolios. This amount also reflects, Mr. Chairman, the reduction in the Administrator's salary and expense funding you mandated last year.

I am happy to be able to report to you that we have completed the initial installation of automation equipment at all levels of the Agency, including all of the 1,931 county offices and 266 district offices, as well as the state offices. This project already permits us to respond to loan requests more quickly and to more adequately service our loan portfolio. We are proceeding with continued implementation of automated field program service delivery as originally planned to occur over the next several years. We believe that we are about to catch up to the private sector in automation and efficiency.

Mr. Chairman, our 1989 budget request is designed to meet the most basic needs of rural America, and it is presented in the spirit of the budget summit concluded in December. This concludes my formal statement. We are again submitting our annual brief history of the Agency which provides much more information on the level of assistance provided to rural America by FmHA over our 52-year history. I will be happy to respond to your questions. Thank you.

A BRIEF HISTORY OF FARMERS HOME ADMINISTRATION

UNITED STATES DEPARTMENT OF AGRICULTURE
FARMERS HOME ADMINISTRATION

While continuing to serve rural America as the lender of opportunity during 1987, the Farmers Home Administration (FmHA) made a significant contribution toward reducing the Federal deficit, a major goal of this Administration. FmHA completed two loan sales to the private sector, resulting in a net gain to the Treasury of nearly $3 billion. Loans sold were from the rural housing and community facilities portfolios, and were the first successful sales of Government assets under a pilot program initiated by Congress in 1986.

In its primary role of providing financial assistance to American farmers, FmHA made or guaranteed during 1987, over 51,000 loans totaling $3 billion to farmers who could not otherwise obtain credit from commercial lenders. Demonstrating that "servicing" loans means helping borrowers, special servicing was extended in almost 80,000 instances, reaching nearly one of every three FmHA farm borrowers. This included 32,000 loans rescheduled or reamortized, 1,250 loans deferred, 29,500 loans subordinated to other lenders, and 17,000 loans refinanced at limited resource interest rates. Without this "last resort" assistance, few, if any, of those farmers could have continued in operation. Instead, more than 98 percent were able to stay in business in 1987.

FmHA's guaranteed farm loans made by other agriculture lenders totaled over $1.6 billion, the highest amount guaranteed in the Agency's history. This follows the direction charted by the Administration and endorsed by Congress in the Food Security Act of 1985.

Also, during the year, the Agency made over 41,000 Single-Family Housing loans to low-income rural families for $1.4 billion and more than 700 loans totaling $555 million for rural rental housing. The Agency also made 1,215 loans and grants for $544 million for water and sewer and other essential community facilities. As an important component of this Administration's rural development initiative, FmHA guaranteed 67 Business and Industry loans for $95.7 million which created or saved more than 6,000 off-farm jobs in rural areas.

Farmers Home recently completed a nationwide automation project, linking all FmHA State, District, and County offices, as well as the National Office and the Finance Office in St. Louis, into a cohesive communications network. This will help us to serve our borrowers faster and more efficiently, and even more importantly, assist borrowers in making better financial farm management decisions.

At Farmers Home, we are committed to working with Congress to meet the growing needs of farmers and all rural Americans and do so in a prudent, and compassionate manner. I believe we have met this goal in 1987 and we will strive to do even better in 1988.

VANCE L. CLARK
Administrator

A BRIEF HISTORY OF FARMERS HOME ADMINISTRATION

The Agricultural Credit Act of 1987 [P.L. 100-233], signed into law by President Reagan on January 6, 1988, will have far-reaching impact on Farmers Home Administration programs. Regulations to implement the new law are scheduled to be published by June 1988. Changes required by the law will become effective during 1988 and will be covered in the next revision of the Brief History.

Farmers Home Administration (FmHA) is the credit agency for agriculture and rural development in the U.S. Department of Agriculture (USDA). In 1987, the agency marked its 52nd anniversary of providing financial and technical assistance in rural America. This service has been performed under the successive names of Resettlement Administration, Farm Security Administration, and Farmers Home Administration.

When it began in 1935, the agency's original function was to make loans and grants to Depression-stricken families and help them regain self-sufficiency in making their living on family farms. Throughout more than half-a-century of operation, FmHA has been concerned primarily with credit and counseling services that have supplemented resources of the private sector for building stronger family farms. In 1987, farm credit still accounted for almost one-half of all resources administered by FmHA.

During the last two decades, Congress created additional nonfarm programs to benefit families and communities in rural areas. These programs have helped to provide safe, modest housing; modern, sanitary water and sewer systems; essential community facilities; and job and economy-boosting business and industry in rural areas. These are reflected in the current mission statement which directs FmHA to "serve as a temporary source of supervised credit and technical support for rural Americans for improving their farming enterprises, housing conditions, community facilities, and other business endeavors until they are able to qualify for private sector resources."

FmHA has been a leading force in spreading the outreach of nongovernmental lending institutions into rural sectors that lacked access to such financial resources. In 1987 the agency completed a nationwide automation project which makes available the efficiency and convenience of computerized farm management and financial planning to all borrowers and applicants.

Over the years, FmHA has developed a credit system that reaches the county level. The agency has approximately 11,000 permanent full-time employees who serve rural America from 46 State offices, 267 district offices, and 1,934 county offices plus the National office in Washington, D.C. Service is provided in every rural county or parish in the 50 States, plus the Pacific Trust Territory, American Samoa, Guam, Puerto Rico, and the Virgin Islands. FmHA's network of offices enables it to maintain a close, one-on-one relationship with its borrowers.

FmHA's existing system of personal contact across the country has established it as a lead agency for rural development. Congress and the Administration continually recognize FmHA's long experience in serving rural communities and farm families and have over the years expanded old services and created new ones.

FmHA loans and grants supplement the amount of credit and capital directly available from commercial lenders in rural areas. In most programs, the agency makes loans to qualified applicants who can find no other sources of financing available on terms or conditions they can meet.

The money loaned by FmHA comes from collections on previous loans, or from private investors through sale of Government securities. In guaranteed loan making, funds are supplied directly to borrowers by commercial lenders, with FmHA minimizing the lender's risk.

Grants for rural water and waste disposal systems, farm labor housing, home repair for low-income elderly people, and "self-help" homebuilding by low-income families supplement the agency's rural lending program.

EARLY CREDIT HISTORY

On July 17, 1916, President Woodrow Wilson signed the Federal Farm Loan Act and marked the beginning of Federal involvement with agricultural credit. The Act created the Federal land banks and the joint stock land banks which were designed to provide farmers with a dependable source of long-term credit at low interest.

Emergency crop and seed loans were provided by Congress through the Secretary of Agriculture from 1918 through 1931. These "feed, seed, and fertilizer" loans were made to assist farmers in designated areas that had suffered unusual hardships, such as droughts and floods, and who could not obtain credit elsewhere. In 1931, these loans were available on a nationwide basis. They usually were limited to $400, with the average loan being $125.

The Reconstruction Finance Corporation (RFC) was established January 22, 1932, and began operation on February 2, 1932. It was charged with meeting emergency credit situations throughout the economy, helping maintain economic stability, and assisting in promoting maximum employment and production. It provided the funds to organize 12 Regional Agricultural Credit Corporations (RACC's) through which operating loans were available to farmers, particularly ranchers, with no other sources of credit.

In the fall of 1932, when Franklin D. Roosevelt was elected President, the need for rural credit was one of the country's major problems. As in the rest of the country, rural banks were closing, farm prices were at an all-time low, unemployed city dwellers were going "back home" to the farms, and sources of credit had evaporated. Angry and threatening mobs of farmers at frequent tax and foreclosure sales were common occurrences.

When Roosevelt was inaugurated on March 4, 1933, he began to implement the Federal Government's attempts to provide agricultural assistance. On March 27, 1933, he issued an Executive Order to be effective May 27, establishing and consolidating within the Farm Credit System, all the functions, powers, and funds of existing Federal agricultural credit agencies.

These included the Federal land banks, Federal land bank associations, the joint stock land banks, the Federal intermediate credit banks, the 12 RACCs from the Reconstruction Finance Corporation, and the crop and seed loans from USDA. The Governor of the Farm Credit Administration could authorize larger loans under the Emergency Crop and Feed Loan program (as it was known in March 1933) to farmers in distressed areas as determined by the Secretary of Agriculture. The Farm Credit System also would include funds for the Secretary of Agriculture to invest in agricultural credit corporations and livestock loan companies, which Congress hoped farmers would use to support organizations that could discount notes with the Federal intermediate credit banks.

By May 12, 1933, Roosevelt had signed the Farm Credit Act of 1933, rounding out the permanent group of banks and associations that make up much of the same cooperative Farm Credit System of today. This act established the production credit corporations, one in each of the 12 Federal land bank districts, to organize, finance and supervise the authorized local production credit associations (PCA's). The Act also established 12 district banks for cooperatives, plus the Central Bank for Cooperatives in Washington, D.C.

On May 12, 1933, Roosevelt also signed the Federal Emergency Relief Act, which is considered the "unofficial" origin of FmHA because of its roots in the rural rehabilitation efforts authorized by the Act.

As a result of the Farm Credit Act, the PCA's assumed the functions of the 12 RACC's in 1933, and by the end of 1934, about 30 percent of their loans had been taken over. The RACC's continued for a time to finance some special loans the PCA's could not handle, and in 1943, loans were made for production of food and fibers needed for World War II.

The Rural Rehabilitation Division, functioning under the Federal Emergency Relief Administration was organized in April of 1934 by authority of the Federal Emergency Relief Act of 1933. However, the rural rehabilitation agency had no basic laws to govern its actions. It was headed by Rexford Tugwell, remembered for his unusual projects such as several low-rent "greentowns" on the far outskirts of a few cities, and government loan programs for smaller farmers--programs that typically involved getting the borrowers to agree to operate their farms under new farming plans drawn up by the county rural rehabilitation representative.

Rural rehabilitation corporations were established in about 40 States to make loans to destitute farm families to enable them to remain on the land, continue their farming operations, and reduce the number of people on the relief rolls.

This approach to farm lending was quite different from that of the Farm Credit System's "business" type loans that were dependent for their financing largely on the sale of their securities to investors without any government guarantee.

In those early days, the differences in philosophies of the two agricultural lending organizations were pronounced. At one point in the early 1930's it was suggested that the Rural Rehabilitation Division should be incorporated into the Farm Credit System. In the early 1940's there were suggestions that all or part of the Farm Credit System might be taken over by the successor to the rural rehabilitation agency, the Farm Security Administration. In 1947, a bill was introduced in Congress which would have combined the Farm Security Administration and Farm Credit System into a new agricultural credit agency. This proposal died in the Senate. Eventually Congress enacted a law to govern the Farm Security Administration which placed some limits on its activities.

After the establishment of the Farmers Home Administration in 1946, much of the talk of merger and takeovers subsided, along with criticism from Congress and farm groups.

RESETTLEMENT ADMINISTRATION

The "official" lineage of FmHA goes back to April 30, 1935, when President Franklin D. Roosevelt signed Executive Order 7027, creating the Resettlement Administration as an independent agency. On June 19, 1935, the Administrator of the Federal Emergency Relief Administration ordered the depression-era programs and functions of the Rural Rehabilitation Division to be transferred to the new agency. On January 1, 1937, all powers and duties vested in the Resettlement Administration were formally assigned to the Secretary of Agriculture.

During its 2-year existence, the Resettlement Administration offered various approaches to solving the problems of poor people and poor land, the most popular of which was the supervised loan program. These loans were part of a Governmentwide effort to help needy rural people reestablish themselves on a self-supporting basis.

The Resettlement Administration made more than 300,000 short-term loans, often supplemented by grants to low-income farm families. Each loan was based on a farm and home management plan worked out by county, farm, and home supervisors in cooperation with the borrowing family. The plans were designed to ensure the use of good farming practices and to fit the needs of the families taking part in the program.

By 1937, there was a growing conviction in USDA and in Congress that supervised credit as pioneered by the Resettlement Administration was the answer to a worsening national problem of hardship and failures among tenant farmers. The scope of loan assistance was broadened on July 22, 1937, with the passage of the Bankhead-Jones Farm Tenant Act which authorized tenant farmers to obtain loans to purchase farms of the their own. In 1937, 40 percent of U.S. farms were operated by tenants and sharecroppers who, because of their uncertain farming tenure, rarely made improvements in land or buildings, nor did their landlords.

The Resettlement Administration was given the responsibility for the new program of supervised farm ownership loans with 40-year terms for farmers who lacked other sources of credit for buying their own land and for farm and home improvement. County committees were set up to select borrowers and approve loans. The tenant purchase loans never reached a high level in the volume of dollars involved or families aided. The program, however, attracted a great deal of attention as it represented the realization of the American dream of people with almost no resources being able to become landowners.

Also enacted in 1937 was the Water Facilities Act to provide loans for individuals and association farm water systems in 17 Western States where drought and water shortage were familiar hardships. The Resettlement Administration shared servicing responsibilities of the program with the Soil Conservation Service and the Bureau of Agricultural Economics. This act was the forerunner of the rural water programs now administered by FmHA.

FARM SECURITY ADMINISTRATION

On September 1, 1937, the Farm Security Administration (FSA) was created as successor to the Resettlement Administration. All functions, funds, personnel, and properties were transferred to the new agency. Its primary responsibilities were to make farm rehabilitation and farm ownership loans to farmers unable to borrow from usual sources of credit.

For the ensuing 9 years, FSA carried on supervised credit programs with farm and home counseling by county office staff, including home economists. The success of a large percentage of these borrowers helped strengthen family farm agriculture and helped the Nation meet its awesome food-producing challenges in World War II. By 1941, FSA had made more than 13,000 loans to tenant families for the purchase of farms.

FSA also carried on Resettlement-oriented projects to establish new farms and communities, services in group medical care, agricultural cooperatives, migratory labor camps, and other social and economic programs.

In 1942, FSA was given full responsibility for the water facilities program in the 17 Western States.

FARMERS HOME ADMINISTRATION

By 1946, it was generally conceded both in and out of Congress and within the agency itself that a restructuring of FSA was necessary. Some old Resettlement programs were no longer justified, others could be improved, and new programs would be needed in the period following World War II.

Accordingly, on August 14, 1946, Congress passed the Farmers Home Administration Act. This measure, which took effect in 1947, reconstituted FSA under the new name Farmers Home Administration.

The Farmers Home Administration consolidated programs of FSA and the Emergency Crop and Feed Loan program of the Farm Credit Administration.

The Farmers Home Administration Act also gave the agency new authority to insure loans made by banks, other agencies, and private individuals, as well as to make direct Government loans. The act brought an end to Rural Rehabilitation loans as federally administered programs. Over 3 million loans, totaling over $1 billion, had been made since 1935 by the Resettlement and Farm Security Administrations.

In its first 3 years, the Farmers Home Administration confined its operations to development of supervised farm ownership and farm operating loan programs, and to water facilities projects in the 17 Western States.

The agency was commonly known as "FHA" until April of 1974 when USDA formally adopted "FmHA" as the agency's abbreviation. This was done to easily distinguish Farmers Home Administration from other agencies having the same initials, such as the Federal Housing Administration and Federal Highway Administration.

EXPANSION OF FmHA SERVICES

The first of many additions to FmHA's portfolio of services, all made available to rural people through the well-established system of FmHA county offices, came in 1949.

On April 19, 1949, the Regional Agricultural Credit Corporations were transferred to FmHA after lending a total of $662 million. The 12 RACC's and their 21 branches were gradually consolidated into one Regional Agricultural Credit Corporation in Washington whose purpose was to handle other specialized lending programs.

The following are highlights of Congressional acts from 1949 through 1987 that have molded FmHA's wide variety of services.

Title V of the Federal Housing Act of 1949 gave FmHA authority to make housing loans to farmers as a part of the national housing program. The major housing programs under this legislation are Section 502, single family housing; Section 504, single family housing repair and rehabilitation; and Section 515, rural rental housing.

The Disaster Loan Act of 1949 originated special emergency farm loans for recovery from losses inflicted by natural disaster.

The Water Facilities Act was amended in 1954 to apply nationwide, rather than limited to the 17 Western States, and to let farm area water systems take on nonfarm customers in rural communities.

Rural development was given Federal program status by USDA administrative action in 1955. FmHA's first involvement was a pilot program of loans to small farmers who could not qualify for regular FmHA loans.

In 1959, FmHA began to make loans to local organizations to cover the local share of the cost of small watershed projects under Public Law 566.

Major overhauling and expansion of FmHA authorities came with passage of the Consolidated Farmers Home Administration Act of 1961. (In 1972, this title was changed to the Consolidated Farm and Rural Development Act, often referred to as the "con act.") Its principal provisions were the following:

- Raised limits on farmer loans to $60,000 for farm ownership, replacing a formula whereby each county's limit had been the average value of its family farms and from $20,000 to $35,000 for farm operating purposes.
- Opened up the water system program to the general rural population, including incorporated towns of up to 2,500. The loan limit on a project (previously $250,000) was raised to $500,000 for a direct FmHA loan and to $1 million for an insured loan.

Also in 1961, the Federal Housing Act was amended to make nonfarm rural residents eligible for FmHA's direct housing loans. This new jurisdiction in rural housing extended to towns of up to 2,500 population.

Still more expansion of FmHA services came in 1962. The Senior Citizens Housing Act set up loans for low-rent apartment projects designed to meet the needs of people age 62 and over. This type housing was acutely lacking in rural communities.

Amendments to the Farmers Home Administration Act authorized loans for a shift in land use to outdoor recreational facilities built primarily to benefit rural people. The agency began to make loans to family farmers to set up farm-based recreation and other nonagricultural enterprises that would add to family income, and for association grazing ranges where family farmers and ranchers share the use of more grazing land for livestock production.

A pilot program for rural renewal, delegated to FmHA, launched experiments in several States to develop better community facilities, improve homesites and housing, and attract new industry to underdeveloped rural areas. Rural renewal was discontinued as an experimental program in 1969.

FmHA also was authorized in 1962 to make loans covering local project costs in areas designated for benefits of a resource, conservation, and development program which, like the small watershed program, is supervised by USDA's Soil Conservation Service.

The Economic Opportunity Act of 1964 established loans to low-income rural people for small farm improvements or nonfarm enterprises that would add to family income. FmHA performed the lending through its county offices with funds provided by the Office of Economic Opportunity until 1971. The agency made nearly 65,000 loans totaling $109.3 million to individuals and 1,476 loans totaling $21 million to cooperatives.

EXPANSION OF PROGRAMS TO PRESENT LEVELS

The expansion of old programs and enactment of new ones during the first 4 years of the 1960's raised FmHA's total loan and grant volume from the $300 million level of fiscal year 1960 to $750 million in fiscal year 1965.

In 1965, the water facilities loan program was transformed into a loan-and-grant program for both water and waste disposal systems. At the same time, rural towns up to 5,500 were made eligible to be included in FmHA-financed projects, and the limit on FmHA financing of a project was raised to $4 million.

Rural housing was changed from a program of direct loans to one primarily of insured loans, and the population limit on towns served through FmHA was raised from 2,500 to 5,500. This opened the way for the greatly increased housing services for rural people.

In 1966, senior citizens and younger low-income families became eligible for FmHA rural housing loans or tenancy in rural rental housing.

In 1968, an overhauling of the Housing Act of 1949 established the interest-supplement housing loan program. It enabled some low-income families to pay as little as 1 percent interest and provided for subsidized loans to developers of low-priced rental housing for low-income families and senior citizens. New programs also were enacted in 1968 for rural homesite development loans and for grants toward support of "self-help" homebuilding group projects. Grants of up to 90 percent, as well as loans, were authorized for farm labor housing projects.

In 1968, Congress abolished a statutory annual ceiling of $450 million on FmHA-insured loan authority for farm ownership and community facilities combined, and raised the national total authorization for water-waste disposal grants from $50 million to $100 million a year.

In 1970, legislation was passed to remove technical barriers to the use of investors' FmHA-insured funds, rather than direct appropriated funds, for loans to tax-exempt public bodies such as municipalities and public service districts. That year marked the beginning of a period of rapid growth and increased service to small towns.

The Housing Act of 1970 raised the population limit to 10,000 for a rural community where FmHA housing loans may be made.

In farm credit programs, the agency took action in 1970 to increase its cooperation with other lenders in jointly serving farm borrowers, with FmHA taking a second lien when the same security is mortgaged both for the FmHA and other lenders' loans. In 1971, the limit on a farm ownership loan secured by a mortgage on real estate was raised from $60,000 to $100,000.

The Rural Development Act of 1972, enacted August 20, 1972, gave USDA primary responsibility for Federal activities in support of rural development. It established the position of Assistant Secretary for Rural Development to coordinate this effort through the programs and expertise of FmHA, the Rural Electrification Administration (REA), and the Rural Development Service (RDS). In 1977, RDS was merged with FmHA, but in 1981 it again became a separate entity as the Office of Rural Development Policy (ORDP). In January 1986, ORDP was abolished and the rural development functions were assumed by the Under Secretary for Small Community and Rural Development. In 1987 the Under Secretary served as coodinator for renewed USDA rural development efforts.

In its other principal provisions affecting FmHA, the act--

* Authorized FmHA to guarantee loans made by commercial lenders for farming, housing, and rural business and industry, including enterprises in cities of up to 50,000 population.

* Abolished the limit of $4 million per project on FmHA financing of water and waste disposal systems, increased the national grant authorization for water and waste disposal to $300 million a year, and raised the population limit on towns eligible for FmHA-financed systems to 10,000.

* Authorized FmHA loans for other kinds of essential community facilities such as fire departments, community halls, hospitals, nursing homes, and other related facilities.

* Authorized FmHA grants to improve rural industrial sites.

* Authorized area assistance planning grants.

* Authorized FmHA to make investor-funded insured loans for farm operating purposes, and raised the limit on farm operating loan from $35,000 to $50,000.

- Authorized youth loans to rural young people under age 21 for farm or nonfarm income-producing enterprises supervised through schools or organizations, such as 4-H Club and Future Farmers of America programs.

- Set $225,000 as the maximum permissible debt against farm property on which FmHA and a cooperating lender may simultaneously hold liens. This enabled FmHA to participate in larger loans up to its limit of $100,000 to family farmers and ranchers.

The emergency loan program to help farmers recover from natural disaster underwent a short-lived expansion in 1972. An act of Congress, stimulated by the Hurricane Agnes disaster in Northeastern States, liberalized emergency loan terms nationwide and decreed nonrepayment of the first $5,000 to cover actual loss. After the cost mounted to about $550 million within a few months, the program was suspended and Congress in 1973 returned emergency loans to a fully repayable basis. Legislation in 1975 established separate categories of disaster emergency loans to cover losses and to finance resumption of farm production operations. Under the Small Business Development Act of 1980, FmHA was given authority to make unsubsidized emergency loans to farmers who are able to get credit from commercial lenders. The law limits loans to these creditworthy borrowers for actual loss only.

A special Emergency Livestock Credit Act for FmHA's guarantee of commercial lenders' loans to livestock and poultry producers in financial distress was enacted July 25, 1974. The program expired September 30, 1979. Under terms of the program, FmHA guaranteed a maximum $350,000 worth of commercial credit for an eligible borrower. Loan guarantees totaling $1.5 billion of principal outstanding were authorized. About $1 billion of this credit was used by farmers and lenders.

Under amendment of the National Housing Act, passed in 1974, FmHA in 1976 introduced its housing loans into towns of 10,000 to 20,000 population outside Standard Metropolitan Statistical Areas (SMSA's)* and certified by the Secretaries of Agriculture and Housing and Urban Development (HUD) to be lacking in mortgage money from other sources. Later in 1976, Congress revised the criteria for serving the larger non-SMSA communities by specifying that consideration be based on shortage of mortgage loan funds for families of low and moderate income. Housing Act amendments of 1974 also authorized extension of FmHA housing loan services to U.S. island territories, including trust territories in the Pacific. (Service was initiated on Guam in 1976 and other islands in 1977.)

The guarantee of commercial lenders' housing loans to families of moderate income was implemented in January 1977 under authorities provided in the Housing and Rural Development Acts. However, under the Housing Act Amendments of 1977, guarantee of housing loans was limited of families with above moderate income. In 1977, FmHA also began making grants to senior citizens with very low income for repair of badly deficient houses, and implemented an authority under housing legislation of 1974 to provide rental assistance supplementing rent paid by low-income tenants of FmHA-financed rental housing.

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* Name changed to Metropolitan Statistical Areas (MSA's) in 1984.

The Emergency Agricultural Credit Adjustment Act, enacted August 4, 1978, substantially changed the farm programs of FmHA and added a new program of economic emergency loans. The new program authorized FmHA to make or guarantee loans of up to $400,000 to farmers or ranchers hard pressed by shortages of credit from regular sources or by a cost-price squeeze. The agency was authorized to carry a maximum of $6 billion in economic emergency loans at any one time. The loans could be used to refinance certain outstanding debts, reorganize the farming operation, and pay other operating expenses. However, funds could not be used to expand farming operations. (See page 12 for extension and expiration of this program.)

The 1978 Agriculture Credit Act also made changes in existing programs --

* Expanded eligibility for farm loans to family corporations, cooperatives, and partnerships, as well as individuals.

* Increased loan limits to $200,000 for insured and $300,000 for guaranteed farm real estate loans and to $100,000 for insured and $200,000 for guaranteed farm operating loans.

* The interest rate for farm ownership loans was changed to be based on the cost of borrowing to the Government. Special interest rates on ownership and operating loans were made available for limited-resource farmers.

* The maximum allowable grant for water and waste disposal projects was increased from 50 percent to 75 percent.

* Revoked the requirement that the Department of Labor clear business and industrial loans of less than $1 million and when employment is less than 50 people.

Powerplant and Industrial Fuel Use Act of 1978 (Section 601) provided energy impact assistance grants to rural communities which faced problems of rapid growth due to new coal and uranium mining. This was sometimes referred to as the boomtown program. Grants were available for planning as well as acquiring and developing sites for housing and public facilities.

Energy impacted areas were designated by State governors and approved by the U.S. Department of Energy. By the end of 1981, approximately 400 grants had been awarded to communities within the designated 24 States. The program has not been funded since 1981.

The Rural Development Policy Act of 1980 gave USDA a leadership role in coordinating a nationwide rural development program. Among other provisions, it created the position of Under Secretary of Agriculture for Small Community and Rural Development and increased FmHA's annual authorization for Section 111 planning grants.

The planning grants under Section 111 had been authorized by the Rural Development Act of 1972. The grants were made to States, substate districts, local governments, and certain community-based organizations to encourage and help meet the cost of comprehensive planning in rural areas. Grants were used for planning a wide variety of services including water, sewer, housing, energy, and economic development. Through its final year of funding, fiscal year 1981, the Federal Government made 605 grants for a total of $19 million.

The Energy Security Act of 1980 was a $20 billion comprehensive synthetic fuel measure designed to spur the production of 500,000 barrels of synfuels daily by 1987 and 2 million barrels by 1992. Small-scale projects (less than 1 million gallons per year) with a loan amount of less than $1 million, and intermediate projects (over 1 million and less than 15 million gallons) became eligible for FmHA financing.

Although the 1978 Emergency Agricultural Credit Adjustment Act set May 15, 1980, as the expiration date for the economic emergency loan program, PL 96-220, enacted in March 1980, extended authority for the program until September 30, 1981. In 1983, the U.S. District Court in Washington, D.C., directed FmHA to reopen its economic emergency loan program for a limited time, from December 22 through September 30, 1984.

The Rural Housing Amendments of 1983, enacted on November 30, created changes in the single family and multifamily housing programs of FmHA. The new legislation directed FmHA to give more priority to serving very-low-income households and making its housing assistance more affordable to low-income persons in rural areas. The law required that FmHA revise its income definitions to be consistent with HUD's and to also accept any of the voluntary national model building codes and HUD minimum property standards, in addition to the FmHA construction standards.

Other provisions of the law:

- Permit FmHA to extend single family home mortgages from 33 years up to 38 years to persons whose incomes do not exceed 60 percent of the area's median income.
- Authorize FmHA to make single family or multifamily housing loans for permanently sited mobile/manufactured housing units, including the lots on which they are located.
- Require not less than 40 percent of the homes financed nationally and 30 percent in each State under the section 502 (single family housing) program to be for very-low-income families.
- Authorize up to $10 million for innovative demonstrations of housing and building systems that may differ from FmHA minimum property standards, while still providing adequate housing for low-income borrowers.
- Establish a new program of housing preservation grants to eligible organizations and units of government to rehabilitate single and multifamily housing.

Regulations implementing part of these changes in the housing laws went into effect October 1, 1985.

The Emergency Agricultural Credit Act of 1984, enacted April 10, 1984, significantly changed FmHA's farm operating and emergency loan programs.

In the emergency loan program, for disasters occurring after May 30, 1983, farmers in counties bordering designated counties are eligible to apply for emergency loans and the application period is extended from 6 months to 8 months. Collateral will be based on its value the day before the emergency designation was requested by the governor or its value 1 year before the request, whichever is higher.

In the operating loan program, loan limits on new loans were raised from $100,000 to $200,000 for insured loans and from $200,000 to $400,000 for guaranteed loans.

The maximum repayment period for rescheduled or consolidated emergency and operating loans increased from 7 to 15 years from the date of the original note. A loan which is rescheduled may be changed to a limited resource loan for a qualified borrower.

Other changes in the law include:

* Interest rates on operating, farm ownership, or emergency loans that are deferred, consolidated, rescheduled, or reamortized are set at the original rate or the current rate, whichever is lower.

* Requiring 20 percent of operating and farm ownership funds to be allotted to limited resource borrowers. States unable to meet the goal may use any remaining funds for regular operating loans.

* Prompt notification of borrowers of limited resource loans.

* Prohibiting FmHA employees involved in the loan review process from buying land for 3 years whenever another person has applied for and been denied an FmHA loan to buy the same land.

* Permitting a study on the feasibility of a program for delinquent farm borrowers to repay their loans with earnings from timber production on land diverted from crops or pasture.

Quotas of lending to very-low and low-income families for homeownership were clarified under a supplemental appropriations bill signed July 2, 1984, and the "Housing and Community Development Technical Amendments Act of 1984," signed October 17, 1984. The housing legislation of 1983 had restricted FmHA to making at least 40 percent of such loans to people of very low income. However, so few people in that category could afford to buy homes, even with the maximum interest credit available, that service to low-income people was severely restricted. The revisions enacted in 1984 authorized the agency to lend 60 percent of its single-family housing funds to the low-income group and 40 percent to those of very low income, with each authority independent of the other.

Based on a four-person household with adjustments for family size, very low income is defined as not more than 50 percent of an area's median income. Low income is not more than 80 percent of the area's median income.

President Ronald Reagan announced a 1-year Farm Credit Initiative program on September 18, 1984. This debt-restructuring plan was designed to assist farmers who were good managers, but experiencing severe financial difficulty, to remain in business and develop sound financial footing. Major initiatives provided:

1. A one-time, interest-free, debt set-aside of up to 25 percent or a maximum of $200,000 (whichever was less), of a

borrower's FmHA debt, provided the set-aside resulted in a positive cash flow.

2. An FmHA guarantee of 90 percent on loans made by other lenders to non-FmHA borrowers, provided the lenders agreed to write off at least 10 percent of their borrower's debt, up to the amount needed to achieve a positive cash flow.

Initiative one expired on September 30, 1985, but initiative two was continued.

On February 6, 1985, Agriculture Secretary John R. Block announced measures to assist financially troubled farmers. They included:

* An interest write-down option in addition to the existing principal write-down option for guaranteed loans.

* An emergency credit assistance program for farmers whose banks have failed. For eligible operators, FmHA can provide a guarantee for new crop loans on a 1-year basis.

The Food Security Act of 1985, enacted December 23, 1985, made major changes in farm loan eligibility and provided additional protections for borrowers undergoing serious financial difficulty.

For farm operating and ownership loans, eligibility was extended to "joint operators," that is, two or more farmers working together and sharing land, labor, equipment, expenses, and income. Eligibility also was extended to include persons related by blood or marriage, as long as the ownership interest of each holder separately constitutes no more than a family farm, even though their collective interests are larger than a family farm.

Eligibility for emergency loans, however, was limited for the first time to family-size farms.

FmHA farm borrowers who are unable to continue their operations, could, under certain conditions, retain their dwelling and a reasonable amount of land or, under other authority, lease back their farm with an option to buy. Other key provisions of the 1985 Act included:

* A requirement that two of the three FmHA county committee members be elected by farmers in the community instead of being appointed.

* An interest rate reduction plan in which FmHA would match, up to 2 percentage points, the reduction in interest by the lender on a guaranteed loan, making a reduction of 4 percentage points possible. FmHA then gives its matching share to the lender.

* A conservation easement program under which a farmer unable to make loan payments to FmHA could, under certain circumstances, sell an easement on wetland, upland, or highly erodible land for conservation purposes for 50 years in exchange for a reduction of the FmHA debt equal to the value of the land in the easement.

* A provision to allow farm borrowers, under certain circumstances, to reamortize a distressed loan with the use of future revenue from softwood timber crops produced on marginal farmland.

To further extend the Agency's ability to assist eligible farmers in need of credit, FmHA in 1986 created "Operation Assist." Under this program, if a county office exhausted its direct operating loan funds, the County Supervisor would personally escort a qualified farmer to a bank or other lending institution to seek a guaranteed loan. About 550 loans for $43 million were handled in this manner in 1986 and 1,530 loans for $127 million in 1987.

In 1987, FmHA completed an historic sale of Government assets. Based on requirements of the Omnibus Budget Reconciliation Act of 1986 and the Continuing Resolution of 1987, Farmers Home sold portions of its rural housing and community programs loan portfolios to the public. The loans were sold on a nonrecourse, taxable basis.

From the sale of single family housing loans, Farmers Home received $1.75 billion plus Subordinate Certificates amounting to $593 million which were to be sold later. Water and waste disposal and community facility loans generated $1.08 billion in cash for the agency.

Before completing the community program loan sale, Farmers Home offered to sell the loans back to borrowers under the Discount Purchase Program. The agency received $52.8 million in cash under this program.

AN UNDUPLICATED RURAL RESOURCE

FmHA programs operate as a supplement to credit made available by private lenders, not in competition with them, and as a helping hand to the capable and industrious family or community whose progress is blocked by lack of credit resources.

A family in need of farm financing, or a loan for an adequate home, may be of modest circumstances and lack credentials for conventional credit. A rural locality may be without a local lending institution, financial needs of the area may exceed the capacity of institutions that are there, or a rural community may not be able to qualify for financing through the conventional bond market.

In circumstances such as these, resources brought within reach through FmHA help to make up for shortages in local and private resources. FmHA lends money raised throughout the Nation from investors in Government securities and also guarantees loans made by city banks and other commercial lenders. In doing so, FmHA relays into the rural United States a flow of outside capital needed for farm, home, community, and rural economic development.

Historically, the availability of credit through FmHA, when none other was to be found, has enabled hundreds of thousands of farm families to keep their foothold on the land, rather than abandon farming.

Through the years, FmHA has enabled 1.5 million poorly housed rural families to move into adequate homes. The agency is currently helping approximately 13,700 borrowers obtain modernized central water and sewer systems.

The "supervised loan" principal adopted by the agency in its earliest years is still necessary to help borrowers achieve the purposes of their loans and to pay back what they have borrowed. Loan losses written off during the 52 years of the agency amount to 1.3 percent of principal advanced.

SOURCES OF INSURED LOAN FUNDS

FmHA loans classified as "insured" are made from three revolving loan funds. The oldest is the Agricultural Credit Insurance Fund (ACIF), established when FmHA began to make insured loans in the 1940's, and now the fund from which all farmer-program loans are made. The Rural Housing Insurance Fund (RHIF) was established with inauguration of insured rural housing loans in 1965. The Rural Development Insurance Fund (RDIF), established under the Rural Development Act of 1972, took over from ACIF the agency's lending for water, sewer, and other community facilities, and for business and industrial development.

The revolving funds are replenished by the incoming flow of loan repayments, plus the sale of Certificates of Beneficial Ownership to the Federal Financing Bank.

Prior to 1974, investors received actual notes or other security instruments FmHA had taken from borrowers. The investor supplied to FmHA an amount equal to principal owed on the note and the agency guaranteed repayment of the investments with interest. As borrowers repaid loans, payments were made to investors and the value of the investment was reduced. Until 1970, with FmHA program levels requiring less than $1 billion a year of note marketing, sales were conducted directly from FmHA. From 1970 through 1973, as marketing requirements rose to more than $2 billion a year, the agency increased sales by marketing large blocks of notes to security dealers, who in turn sold them to trust funds and other large investors.

In 1974, FmHA discontinued the marketing of actual notes and introduced a new investment security instrument, the Certificate of Beneficial Ownership (CBO). CBO's are issued against pools of loan notes and signify that investors will share in interest earnings. Since 1977, FmHA has placed CBO's only with the Federal Financing Bank, an institution closely related to the Department of Treasury, and has sold no CBO's to the public.

SUMMARY BY PROGRAM AREA

From the beginning of the Resettlement Administration in 1935 until the end of fiscal year 1987, a total of $146,722,983,388 was advanced or obligated in more than 9.9 million loans and grants made through FmHA and its predecessor agencies.

Program by program, the all-time totals as of September 30, 1987, are shown on page 23. The unpaid principal owed to FmHA on all FmHA loans as of September 30, 1987, totaled $64,892,062,000, including guaranteed loans.

The annual volume of programs, making FmHA the largest Federal loan agency dealing directly with borrowers, reflects the emphasis during the 1960's and 1970's on resources for development or revival of the whole rural community. Money spent annually on programs increased from $300 million to $1.6 billion during the 1960's. Since then, the following annual levels have been recorded (in thousands):

FY 1970 --	1,639,749
FY 1971 --	2,414,316
FY 1972 --	2,789,806
FY 1973 --	3,754,934
FY 1974 --	3,601,475
FY 1975 --	5,486,089
*FY 1976 --	7,190,920
FY 1977 --	7,255,534
FY 1978 --	11,111,102
FY 1979 --	14,601,635
FY 1980 --	12,965,758

FY 1981 --	13,975,037
FY 1982 --	8,778,217
FY 1983 --	7,314,494
FY 1984 --	7,995,093
FY 1985 --	9,511,665
FY 1986 --	7,001,008
FY 1987 --	5,781,145

*Includes Transition Quarter

The downward dip between fiscal years 1973 and 1974 was attributed to an exceptionally great outlay for farm emergency loans in 1973 and a January-June moratorium on new subsidized housing that decreased the backlog of loan applications for fiscal year 1974. The high volumes from 1978 through 1981 included record levels for farm emergency, housing, community facility, and business and industrial programs.

Following are summaries of current FmHA services.

FARMER PROGRAMS

FmHA helps finance farmers who generally cannot get credit they need from other lenders at reasonable rates and terms. Figures indicate FmHA held 7 percent of the total outstanding farm debt in 1978. The amount has steadily increased and stood at 15.9 percent at the end of 1987.

The average size of farm loans made by FmHA in fiscal year 1987 ranged from $44,589 for an emergency loan to $151,800 for a guaranteed farm ownership loan. The overall average was $59,360. The averages by types of loans are the following: direct farm ownership, $83,704; guaranteed farm ownership, $151,810; direct operating, $40,450; guaranteed operating, $91,136; and emergency, $44,589. Interest rates for guaranteed loans are negotiated between lender and borrower. The interest rate for insured loans is set periodically by the Secretary of Agriculture, based on the cost of Government borrowing.

Farm ownership loans, insured or guaranteed, enable family-size farmers lacking other sources of credit to buy, improve, or refinance farm real estate. Family-size farms operated by individuals, partnerships, cooperatives, or corporations can be considered for eligibility. Loan limits are $200,000 for insured loans and $300,000 for guaranteed loans. Farm ownership loans may be repaid in up to 40 years. Insured loan borrowers must refinance through conventional lenders when financially able, thereby "graduating" from FmHA credit. Loans are secured by mortgages on the farm real estate.

Farm operating loans, insured or guaranteed, are usually secured by chattel mortgages on crops, livestock, machinery, or other elements of production. Family farmers and ranchers lacking other sources of production financing may be eligible. The limit is $200,000 for insured loans and $400,000 for guaranteed loans. Terms for operating loans usually range from 1 to 7 years, according to loan purposes, with a maximum repayment period of 15 years for consolidated or rescheduled loans. A loan which is rescheduled may be changed to a limited resource loan for a qualified borrower.

Limited resource insured farm ownership and operating loans are made to owner-operators or tenant-operators who, because of lack of experience, equipment, capital, land, adequate financing, or due to underdeveloped farms, low net income, and inadequate cash flow, need a lower interest rate to service their debts and have a reasonable chance of success.

Disaster Emergency (EM) loans help farmers recover from actual production and physical losses inflicted by natural disasters such as drought, floods, and hail-storms.

To be eligible for an emergency loan, the county in which the farm is located must have been declared an emergency or major disaster area by the President, or determined to be a natural disaster area by the Secretary of Agriculture, or in some cases, by the FmHA Administrator. The FmHA Administrator can make the determination for severe physical loss loans only. Farmers in counties contiguous to a designated county may also quality for EM loan assistance.

To qualify, applicants must be unable to obtain suitable credit elsewhere.

Other farmer programs include insured or guaranteed loans for improvement of soil and water resources, and insured loans to Indian tribal organizations to buy privately owned land located within reservation boundaries.

HOUSING PROGRAMS

Housing credit was scarce in rural America until the late 1960's, and the consequences were visible throughout the Nation's towns and countryside. With 27 percent of the national population, rural America had 47 percent of the Nation's substandard housing. This meant that the ratio of bad housing to the number of families was twice as great in rural communities as in the cities.

A large-scale attack on rural housing blight was mounted by FmHA in 1965. Insured loan service comparable to Federal urban housing credit was made available to rural people of low or moderate income. Over 1.1 million new or modernized family-owned homes and about 365,000 new apartment units have been built in rural communities. About one-third of the apartment projects fill the need of elderly people for low-cost rental housing.

Since 1949, FmHA has provided over $50 billion for housing. During fiscal year 1987, FmHA loans and grants for $2 billion funded more than 59,000 living units.

Individual home ownership (Section 502) insured loans go to families of very low, low, and moderate income, including senior citizens, who need adequate housing. Maximum term for repayment is 38 years. Interest rates vary according to the cost of Government borrowing. Interest credit, which may reduce the effective interest rate to as low as 1 percent, may be available to qualified low-income borrowers.

FmHA housing credit is available to eligible applicants in rural communities with populations of less than 10,000. This credit may be available in communities between 10,000 and 20,000 if they are not within a Metropolitan Statistical Area (MSA), and the Secretaries of the Departments of Agriculture and Housing and Urban Development have determined that there is a serious lack of credit for low- and moderate-income households in that location.

Very-low-income homeowners may be eligible for low-interest (Section 504) loans for repairs of up to $7,500 needed to remove health and safety hazards. Very-low-income elderly homeowners may be eligible for a maximum loan of $7,500, a maximum grant of $5,000, or maximum loan-grant combination of $7,500 to make necessary repairs to their homes. In order to qualify for assistance, applicants must be 62 years of age or older and have an income so low they cannot repay all or part of a Section 504 loan.

Rental housing (Section 515) insured loans provide modernized rental or cooperative housing for persons with low and moderate incomes and for those age 62 and older in communities of not more than 10,000 population. Such loans may also be available in communities between 10,000 and 20,000 population if the facility is not within an MSA. The loans are repayable in not more than 50 years. Provisions are made for interest reductions under certain circumstances, so that low-income tenants may pay a rent within their means. Rent paid by low-income tenants also can be supplemented through a rental assistance program administered by FmHA or HUD's section 8 rent subsidy program.

Mutual self-help housing grants are made to eligible nonprofit or public organizations to assist low-income families who wish to work together to build their own homes with financial assistance under the 502 rural housing program. The grant is used to pay for technical assistance the families may need in constructing the home with their own resources.

Specialized housing programs include loans and grants for development of adequate farm labor housing, grants to qualified organizations to help low-income families accomplish "self-help" home-building projects, 2-year loans to nonprofit organizations to develop rural homesites, and housing rehabilitation assistance through local public and nonprofit groups for rural homeowners.

COMMUNITY PROGRAMS

Water and waste disposal program -- FmHA and its predecessor agencies have financed approximately 13,680 water and waste disposal systems in rural areas and towns of up to 10,000 people. Public bodies, corporations operated on a nonprofit basis, and Indian tribes that are unable to obtain credit from other sources at reasonable rates and terms are eligible for assistance. Loan repayment can be scheduled for up to 40 years of the useful life of the facility. Interest rates are based on the current market yield of municipal obligations. Certain loans may be made at a lower rate. Applicants can have the option of the interest rate in effect at the time of loan approval or closing. In some cases, grants can be made to reduce user rates to a reasonable level for farmers, ranchers, and rural residents.

Community facilities -- The Rural Development Act of 1972 extended FmHA's lending authority to include loans to public bodies or nonprofit organizations for community facilities that provide essential services to rural residents. Fire protection, community halls, hospitals, nursing homes, medical clinics, libraries, and schools are among more than 30 categories of community facilities eligible for financing.

Facilities may be in the rural countryside or towns of up to 20,000 population. Loan repayment can be scheduled for up to 40 years or the useful life of the facility. Interest rates are fixed for the life of the loan and are based on the current market yield for municipal obligations. Certain loans may be made at a lower rate. Additional interest charges may apply to projects located on prime or unique farmland.

Loan applications for public safety such as rescue or fire protection facilities and equipment receive priority status for funding. Joint funding of projects with other lending sources is emphasized in order to receive maximum benefit from program sources.

Other programs -- Local costs of projects developed under the small watershed and resource conservation and development programs also may be financed through loans by FmHA to sponsoring local organizations.

BUSINESS AND INDUSTRY PROGRAMS

The business and industry (B&I) loan program was legislated in 1972 under Section 310B of the Consolidated Farm and Rural Development Act in order to encourage business and industrial development in rural areas and to create or preserve employment opportunities in these areas. The program has been administered primarily as a guaranteed loan program in communities under 50,000 population, with emphasis on communities of less than 25,000.

When the program began in 1974, there was little rural business credit available. Most industries had not yet recognized the benefits of locating in rural areas and, at that time, national migration was toward larger cities. Both tendencies have since moderated. During the life of the program, FmHA has obligated for guarantee 7,175 business and industry loans totaling $5.8 billion. In fiscal year 1987, 67 of these loans were obligated for guarantee for $95.7 million.

Under the business and industry program, commercial loans, guaranteed up to 90 percent against loss of principal and interest, are made by lenders to individuals and corporations. The interest rate is negotiated between the borrower and the lender. Loans may be made for improving, developing, or financing business, industry, and employment.

With renewed interest in Rural Development, Farmers Home was a strong participant in efforts to help rural America rebound from recent economic hardships. While ongoing programs of farms, housing, and community facility loans continued to support rural areas, the B&I program guaranteed $95.7 billion in loans -- 43 percent higher than the preceding year -- which generated more than 6,000 jobs.

Farmers Home also provided $20 million in loans and $14 million in grants to the Nonprofit National Corporations Programs. Three NNC's have been established to assist local businesses establish rural development projects. The projects are intended to create new businesses or expand existing ones, to help diversify the local economy, and to provide income to displaced farm families.

1987 OBLIGATIONS FOR ALL PROGRAMS

Nationwide and State totals of major FmHA loans and grants for fiscal year 1986 follow.

U.S. DEPARTMENT OF AGRICULTURE
FARMERS HOME ADMINISTRATION

Loans and Grants by Program -- Fiscal Year 1987

FARMER PROGRAMS:	No. of Loans and Grants	Dollar Amount
Farm Operating Loans	45,710	$2,539,019,214
Farm Ownership Loans	3,033	399,418,352
Emergency Loans	2,548	113,612,905
Soil and Water Loans (individual)	234	4,535,860
Indian Tribe Land Acquisition Loans	1	2,000,000
Farmer Programs, Total	51,526	$3,058,586,331
RURAL HOUSING PROGRAMS:		
Low-Moderate Income Housing Loans	33,612	$1,143,925,523
Compensation for Construction Defects (Grants)	78	241,109
Very-Low-Income Repair Loans	1,966	5,848,061
Very-Low-Income Repair Grants	3,623	12,498,247
Rural Rental Housing Loans	744	554,898,880
Rental Assistance Program:		
Rental Housing (24,689 units)	1,777	272,741,764
Labor Housing (232 units)	7	2,562,904
Farm Labor Housing Loans	44	10,685,785
Farm Labor Housing Grants and Contracts	11	7,582,359
Site Loans	2	199,700
Self-Help Housing Grants and Contracts	42	8,398,408
Rural Housing Preservation Grants	155	19,140,000
Self Help Land Development Fund	2	500,000
Housing Programs, Total	42,063	$2,039,222,740
COMMUNITY PROGRAMS:		
Water and Waste Disposal Development Loans	679	$ 330,380,000
Water and Waste Disposal Development Grants	319	117,663,266
Community Facility Loans	217	95,700,000
Watershed Protection and Flood Prevention Loans	1	148,200
Rural Development Grants	1	3,000,000
Development Grants Other Than FmHA	29	7,340,628
Finance Corporation Loans	12	19,140,000
Finance Corporation Grants	3	14.263.668
Community Programs, Total	1,284	$ 587,635,762
BUSINESS & INDUSTRY PROGRAM:		
Business & Industrial Loans	67	95,699,770
B & I Programs, Total	67	$ 95,699,770
FmHA PROGRAMS, TOTAL:		
Loans	90,656	$5,591,016,918
Grants (FmHA)	4,232	182,787,057
Grants Other Than FmHA	29	7,340,628
FmHA Programs, Total	94,917	$5,781,144,603

NOTE: All guaranteed loans based on guarantee rates.

STATISTICS ON FmHA PERFORMANCE BY FISCAL YEAR
(Dollars in Billions)

I Number of Active Borrowers and Amount Outstanding as of End of Fiscal Year: 1/

	1985		1986		1987	
	Number Borrowers	Amount (Bil)	Number Borrowers	Amount (Bil.)	Number Borrowers	Amount (Bil.)
Farm Operating	133,811	$ 6.2	119,922	$ 6.3	109,793	$5.9
Farm Emergency	121,709	9.9	113,002	9.4	102,967	8.6
Economic Emergency	56,695	4.1	48,172	3.9	42,859	3.5
Farm Ownership	126,270	7.5	124,451	7.7	118.379	7.5
RH 502/504	1,003,812	22.6	971,588	22.2	785,536	18.3
Rental Housing	10,914 2/	6.3 2/	11,875 3/	7.4 3/	14,307	7.8
Water & Waste	13,195	6.4	13,413	6.7	9,680	5.3
All Programs 4/	1,489,156	65.1	1,424,241	65.8	1,203,168	58.9

II Writeoffs as Percent of Cumulative Advances (Insured and Direct Programs):

	1985 Sept. 30th	1986 Sept. 30th	1987 Sept. 30th
Farm Operating.......	1.11%	1.23%	1.84%
Farm Emergency:	.91	.85	1.98
Economic Emergency	.64	1.29	1.85
Farm Ownership.......	.17	.32	1.01
RH 502/504...........	.22	.25	.32
Rural Rental Housing.	.01	5/	5/
Business & Industrial Loans	0	.38	.38
All Programs...... 4/	.62%	.50%	1.31%

1/ Excludes guaranteed borrowers
2/ Information as of 3/31/85
3/ Estimated
4/ Includes small programs not listed, so columns do not add
5/ Information is not currently available

FARMERS HOME ADMINISTRATION
Loans and Grants by Program -- All-Time Total
through September 30, 1987

	Number of Loans or grants	Dollar Amount
FARMER PROGRAMS:		
Farm Operating Loans	2,637,290	$ 27,116,529,872
Farm Ownership Loans	412,430	12,565,116,519
Recreation Loans (individual)	463	20,527,880
Emergency Loans	1,241,646	23,011,089,843
Grazing Association Loans	605	129,419,696
Soil and Water Loans (individual)	44,031	500,419,162
Irrigation and Drainage Loans	610	32,240,909
Indian Land Acquisition Loans	88	98,681,800
Farmer Programs, Total	4,337,163	$ 63,474,025,681
RURAL HOUSING PROGRAMS:		
Individual Housing Loans (502 & 504)*	1,978,907	$ 38,634,732,225
Compensation for Construction Defects (Grants).	555	1,727,992
Very-Low-Income Repair Grants	62,437	165,430,630
Rural Rental Housing Loans	20,931	9,831,430,856
Rental Assistance Program:		
Rental Housing (165,918 units)	5,159**	2,697,195,621
Labor Housing (5,818 units)	41**	107,162,745
Farm Labor Housing Loans	1,902	214,754,934
Farm Labor Housing Grants	268	192,747,944
Site Loans	131	17,187,420
Self-Help Housing Grants	583	102,044,347
Self-Help Land Development Fund	47	8,652,010
Rural Housing Supervisory Assistance Grants	57	5,000,000
Rural Housing Preservation Grants	284	38,280,000
Housing Programs, Total	2,071,302	$ 52,016,346,724
COMMUNITY PROGRAMS:		
Water and Waste Disposal Development Loans	28,636	$ 9,462,454,844
Water and Waste Disposal Development Grants	13,646	3,013,777,273
Community Facility Loans	5,197	2,389,390,470
Industrial Development Grants	1,368	86,549,279
Watershed and Flood Prevention Loans	491	176,072,424
Resource Conservation and Development Loans	291	29,412,409
Rural Development Planning Grants (ADA)	605	19,000,000
Finance Corporation Loans	12	19,140,000
Finance Corporation Grants	3	14,263,668
Development Grants Other than FmHA	2,126	350,917,950
Community Programs, Total	52,375	15,560,978,317
BUSINESS & INDUSTRY PROGRAMS:		
Guaranteed Business/Industrial Loans	7,175	5,825,974,844
Business/Industry Programs, Total	7,175	$ 5,825,974,844
DISCONTINUED PROGRAMS:		
Emergency Livestock Loans	7,738	$ 1,045,660,130
Economic Emergency Loans	126,770	7,227,951,980
State Corporation Farm Operating Loans	185,904	158,964,394
Rural Rehabilitation Loans	3,031,331	1,015,825,965
Economic Opportunity Loans (indiv.)	64,660	109,394,912
Economic Opportunity Loans (assn.)	1,476	21,107,481
Recreation Association Loans***	1,035	110,510,460
Rural Renewal Loans	56	6,550,300
Water Facility Loans (indiv.)	18,296	29,695,363
Water/Sewer Comprehensive Planning Grants	1,834	22,293,387
Bureau of Reclamation, Soil and Water Loans	283	4,935,550
Land Conservation and Development Loans	274	267,900
Special Impact Grants	2	2,700,000
State Corporation Farm Ownership Loans, Agricultural Credit Corporation Loans, Resettlement Projects, Water Utilization and Construction Loans	(number not available)	****89,800,000
Total Discontinued	3,439,659	$ 9,845,657,822
GRAND TOTALS --	9,907,674	$146,722,983,388

*Includes very-low-income repair loans.

**Data collection started in 1983.

***Recreation Assn. Loans included in Community Facility Loans since 1974.

****Not included in Table 5 cumulative totals.

MAJOR PROGRAM TOTALS BY STATE - FISCAL YEAR 1987
(In Millions of Dollars)

State	FARM PROGRAMS		HOUSING PROGRAMS		COMMUNITY SERVICE		BUSINESS & INDUSTRY		TOTAL ALL PROGRAMS	
	Number	Dollars	Number	Dollars	Number	Dollars	Number	Dollars	Number	Dollars
ALABAMA	700	39.2	1,243	46.1	36	10.7	1	1.5	1,980	97.5
ALASKA	1	0.0	58	2.6	1	0.6	0	0.0	60	3.2
ARIZONA	45	2.6	480	25.9	9	7.5	0	0.0	534	36.0
ARKANSAS	1,466	91.6	1,136	53.5	78	24.9	1	2.5	2,681	172.5
CALIFORNIA	706	64.3	1,782	127.5	15	10.7	0	0.0	2,503	202.5
COLORADO	356	30.7	290	20.2	7	1.4	1	1.0	654	53.3
CONNECTICUT	59	2.2	279	23.7	18	6.4	0	0.0	356	32.3
DELAWARE	62	7.1	134	7.7	0	0.0	0	0.0	196	14.8
DISTRICT OF COLUMBIA	0	0.0	0	0.0	3	11.0	0	0.0	1	4.9
FLORIDA	214	13.7	964	65.1	23	15.8	1	1.8	1,202	96.4
GEORGIA	988	75.6	868	50.2	31	15.5	1	7.5	1,888	148.8
HAWAII	44	2.1	343	22.1	0	0.0	4	5.0	391	29.2

State	FARM PROGRAMS Number	FARM PROGRAMS Dollars	HOUSING PROGRAMS Number	HOUSING PROGRAMS Dollars	COMMUNITY SERVICE Number	COMMUNITY SERVICE Dollars	BUSINESS & INDUSTRY Number	BUSINESS & INDUSTRY Dollars	TOTAL ALL PROGRAMS Number	TOTAL ALL PROGRAMS Dollars
IDAHO	667	53.0	376	11.8	6	2.2	0	0.0	1,049	67.0
ILLINOIS	2,243	116.5	1,024	40.5	30	11.3	2	2.5	3,299	170.8
INDIANA	786	46.7	686	35.8	25	10.7	0	0.0	1,497	93.2
IOWA	3,935	202.0	651	31.3	27	10.0	0	0.0	4,613	243.3
KANSAS	1,753	108.5	357	13.7	17	6.5	0	0.0	2,127	128.7
KENTUCKY	1,416	53.3	1,398	60.8	53	26.4	3	11.6	2,870	152.1
LOUISIANA	2,828	200.0	1,008	58.6	56	29.6	0	0.0	3,892	288.2
MAINE	414	11.4	1,189	80.9	50	18.8	0	0.0	1,653	111.1
MARYLAND	157	8.9	499	34.9	7	2.5	0	0.0	663	46.3
MASSACHUSETTS	81	2.4	755	57.1	20	14.9	0	0.0	856	74.4
MICHIGAN	1,332	90.7	1,293	69.2	29	15.7	1	0.1	2,655	175.7
MINNESOTA	3,104	178.0	527	35.2	47	26.7	1	4.5	3,679	244.4
MISSISSIPPI	1,589	122.2	2,791	91.7	77	23.7	4	8.9	4,461	246.5

State	FARM PROGRAMS		HOUSING PROGRAMS		COMMUNITY SERVICE		BUSINESS & INDUSTRY		TOTAL ALL PROGRAMS	
	Number	Dollars	Number	Dollars	Number	Dollars	Number	Dollars	Number	Dollars
MISSOURI	1,886	88.9	1,040	45.8	34	7.2	3	1.8	2,963	143.7
MONTANA	822	68.4	262	9.4	3	2.9	0	0.0	1,087	80.7
NEBRASKA	2,490	154.1	333	11.8	4	0.7	1	5.0	2,828	171.6
NEVADA	42	2.3	76	11.2	0	0.0	0	0.0	118	13.5
NEW HAMPSHIRE	28	0.7	339	17.1	10	8.4	0	0.0	377	26.2
NEW JERSEY	101	5.2	549	33.2	7	8.6	0	0.0	657	47.0
NEW MEXICO	232	20.1	391	21.9	2	0.4	0	0.0	625	42.4
NEW YORK	780	34.9	1,029	55.6	29	12.9	0	0.0	1,838	103.4
NORTH CAROLINA	1,309	56.3	1,681	94.2	50	27.9	11	7.7	3,051	186.1
NORTH DAKOTA	2,700	154.7	233	8.5	11	3.7	0	0.0	2,944	166.9
OHIO	1,000	63.4	1,249	56.6	45	19.7	4	2.6	2,298	142.3
OKLAHOMA	1,986	151.5	659	26.4	43	24.7	2	1.4	2,690	204.0
OREGON	360	31.0	612	26.9	5	1.8	0	0.0	977	59.7

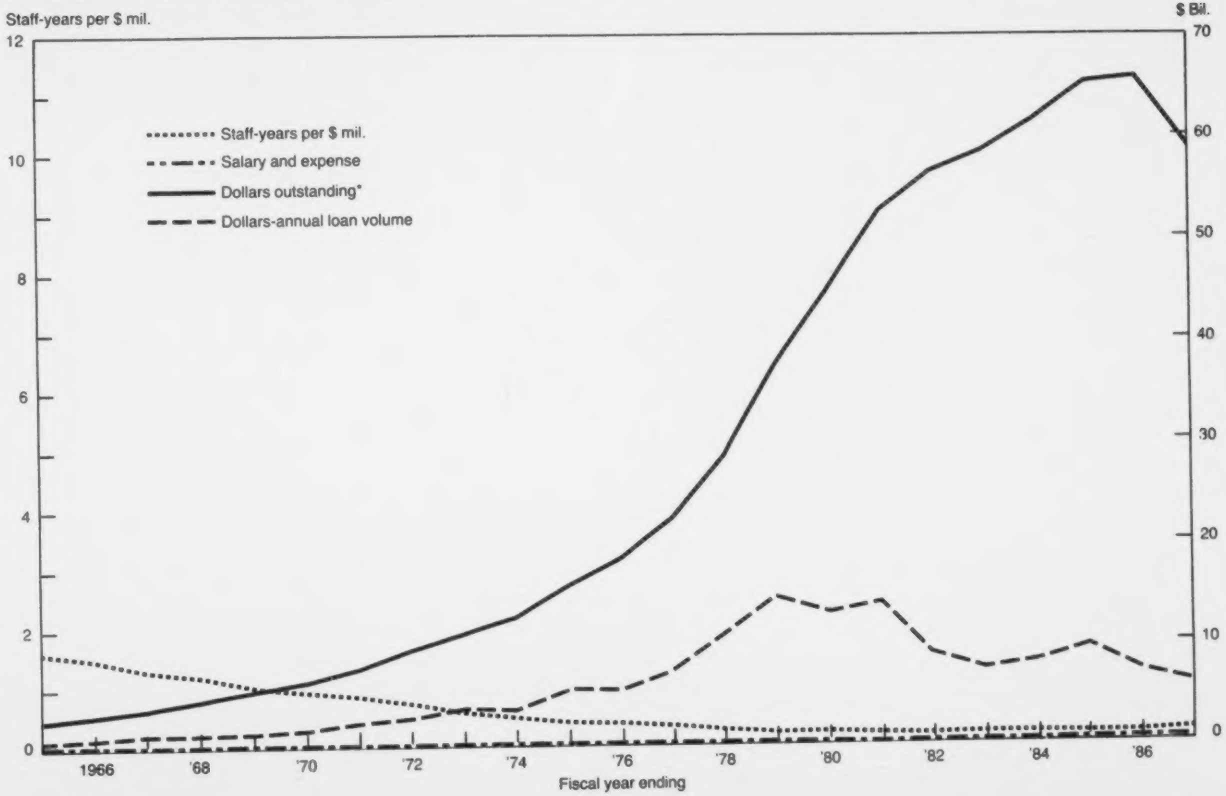
State	FARM PROGRAMS Number	FARM PROGRAMS Dollars	HOUSING PROGRAMS Number	HOUSING PROGRAMS Dollars	COMMUNITY SERVICE Number	COMMUNITY SERVICE Dollars	BUSINESS & INDUSTRY Number	BUSINESS & INDUSTRY Dollars	TOTAL ALL PROGRAMS Number	TOTAL ALL PROGRAMS Dollars
PENNSYLVANIA	839	30.9	1,881	73.6	43	30.5	0	0.0	2,763	135.0
RHODE ISLAND	8	0.5	139	10.1	9	4.9	0	0.0	156	15.5
SOUTH CAROLINA	780	37.6	1,435	68.8	45	28.9	1	0.2	2,261	135.5
SOUTH DAKOTA	1,305	51.4	226	16.9	15	2.6	1	2.2	1,547	73.1
TENNESSEE	1,162	56.9	1,746	72.2	25	6.9	3	4.5	2,936	140.5
TEXAS	3,755	218.1	1,811	75.4	42	22.2	3	1.9	5,611	317.6
UTAH	160	8.4	298	8.6	6	1.7	0	0.0	464	18.7
VERMONT	314	9.5	368	15.2	23	10.4	0	0.0	705	35.1
VIRGINIA	495	21.3	1,141	46.2	51	21.8	0	0.0	1,687	89.3
WASHINGTON	548	47.1	620	36.6	21	6.5	0	0.0	1,189	90.2
WEST VIRGINIA	233	6.5	857	31.3	25	10.1	13	17.0	1,128	64.9
WISCONSIN	2,652	181.5	872	41.3	22	6.0	3	2.1	3,549	230.9

State	FARM PROGRAMS		HOUSING PROGRAMS		COMMUNITY SERVICE		BUSINESS & INDUSTRY		TOTAL ALL PROGRAMS	
	Number	Dollars	Number	Dollars	Number	Dollars	Number	Dollars	Number	Dollars
WYOMING	301	27.8	124	4.3	2	0.1	2	2.6	429	34.8
PUERTO RICO	290	6.6	1,320	43.8	24	12.4	0	0.0	1,634	62.8
VIRGIN ISLANDS	1	0.1	11	0.4	0	0.0	0	0.0	12	0.5
WEST PACIFIC TERRITORIES	1	0.1	630	9.8	0	0.0	0	0.0	631	9.9
TOTALS	51,526	3058.5	42,063	2039.2	1,261	587.4	67	95.9	94,917	5781.0

(Totals may not add due to rounding.)

Figure 1

Loan and Grant Volume and Staff Productivity



*Does not include "guaranteed loans"

Table 1--Loan and grant volume and staff productivity

	*Principal dollars outstanding, end of fiscal year (Billions)	Annual loan and grant volume (Billions)	Total dollars (Billions)	Total staff years	Salaries and expenses (Millions)	Dollars for which one person is responsible (Millions)	Number of staff years for loan processing and servicing per million dollars
1965	2.753	0.800	3.553	5,858.0	49.563	0.607	1.6
1966	3.221	1.088	4.309	6,590.1	57.826	0.654	1.5
1967	3.914	1.390	5.304	7,102.5	62.214	0.747	1.3
1968	4.778	1.359	6.137	7,360.1	67.861	0.834	1.2
1969	5.552	1.431	6.983	7,271.7	72.354	0.960	1.0
1970	6.525	1.639	8.164	7,662.7	86.159	1.065	0.94
1971	7.869	2.414	10.283	8,533.9	103.422	1.205	0.83
1972	9.622	2.789	12.411	8,865.9	113.888	1.400	0.71
1973	11.206	3.750	14.956	8,672.0	121.766	1.725	0.58
1974	12.977	3.591	16.568	8,168.4	128.724	2.029	0.49
1975	15.863	5.466	21.302	8,359.0	142.828	2.548	0.39
1976	18.456	5.393	23.849	8,555.4	158.692	2.788	0.36
1977	22.526	7.236	29.762	9,405.4	187.959	3.164	0.32
1978	28.712	11.089	40.428	10,233.0	227.867	3.952	0.26
1979	37.304	14.602	51.976	10,842.0	254.517	4.794	0.21
1980	44.630	12.966	57.596	11,813.0	288.321	4.876	0.21
1981	52.470	13.975	66.445	12,541.0	322.748	5.298	0.19
1982	56.213	8.778	64.975	11,213.0	327.231	5.795	0.17
1983	58.514	7.314	65.828	11,566.0	356.595	5.692	0.18
1984	61.548	7.997	69.543	12,658.0	390.661	5.494	0.18
1985	65.100	9.512	74.610	12,563.0	412.724	5.940	0.17
1986	65.831	7.001	72.842	12,579.0	424.001	5.791	0.17
1987	58.935	5.781	64.716	12,715.0	449.063	5.090	0.20

* Does not include guaranteed loans.

Figure 2

Report of Loan Collection and Debt Adjustment Activities During the Year

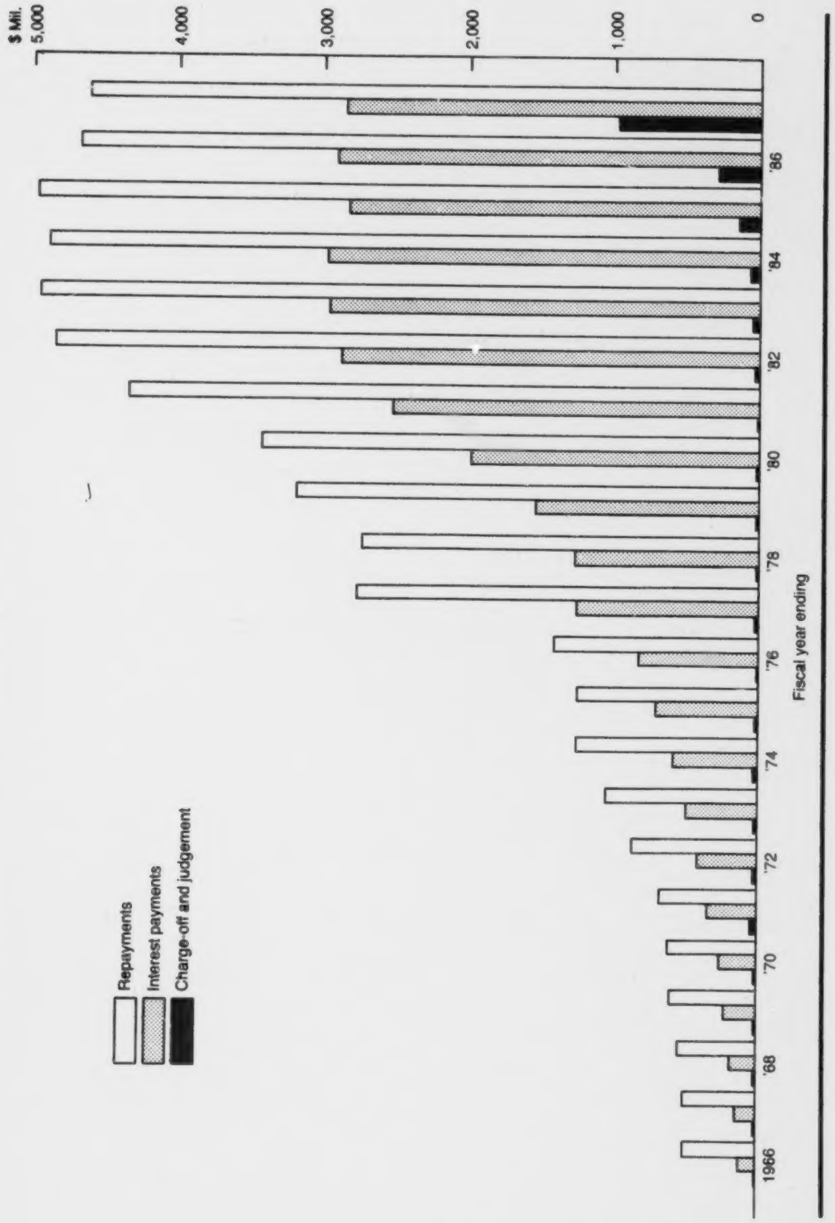
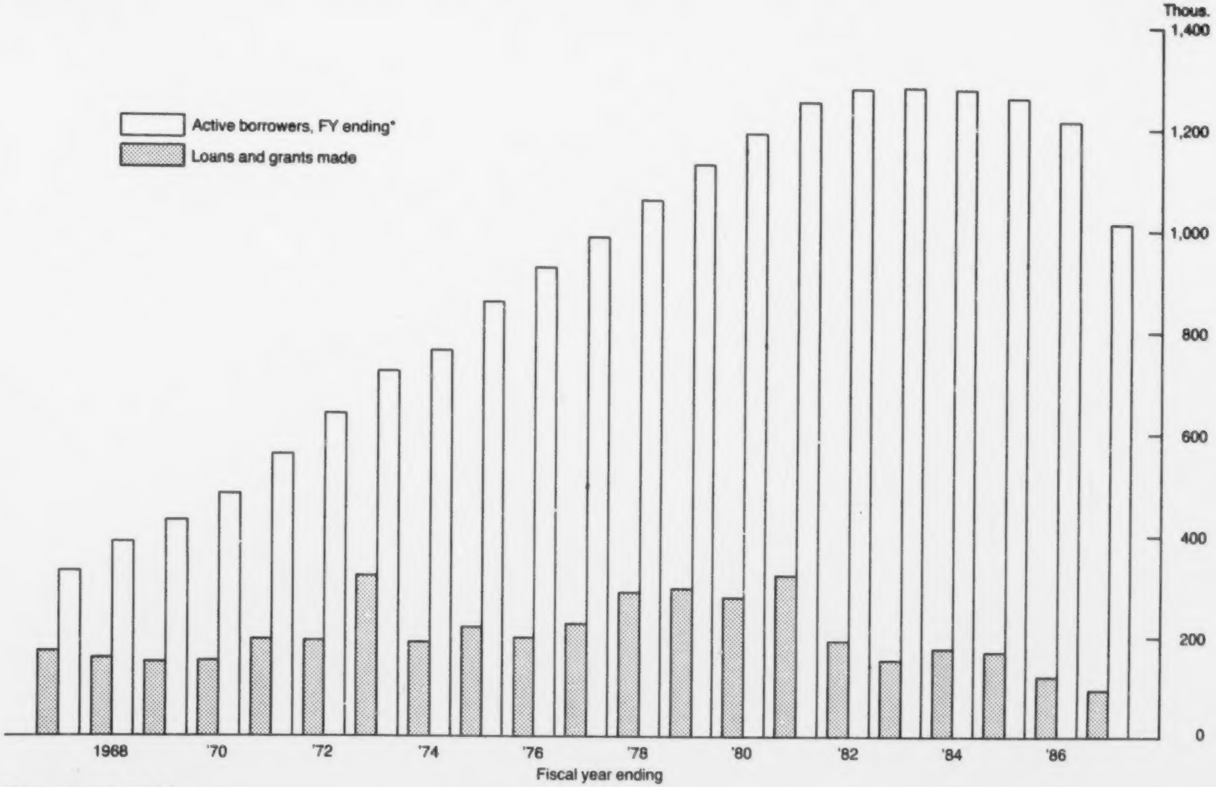


Table 2--Report of loan collection and debt adjustment activities during the year

Fiscal year	Principal repayments (Millions)	Principal chargeoffs and judgments (Millions)	Interest payments (Millions)
1966	$ 502.6	$ 4.9	$ 118.6
1967	503.4	17.9	145.7
1968	539.9	12.5	182.6
1969	599.2	16.1	222.9
1970	610.5	13.7	259.1
1971	671.6	33.8	344.8
1972	859.2	26.3	415.4
1973	1,045.0	19.7	497.9
1974	1,247.1	22.2	589.2
1975	1,244.2	18.5	704.1
1976	1,404.5	9.2	824.6
1977	2,753.6	21.9	1,251.7
1978	2,725.5	14.3	1,268.3
1979	3,173.3	16.5	1,543.1
1980	3,418.9	15.6	1,983.3
1981	4,325.4	6.9	2,522.6
1982	4,838.2	29.8	2,873.1
1983	4,943.8	43.3	2,960.5
1984	4,885.6	64.6	2,971.4
1985	4,961.9	141.8	2,828.9
1986	4,677.5	290.0	2,911.6
1987	4,615.6	974.6	2,855.5

Figure 3

FmHA Statistics



*Guaranteed loans not included.

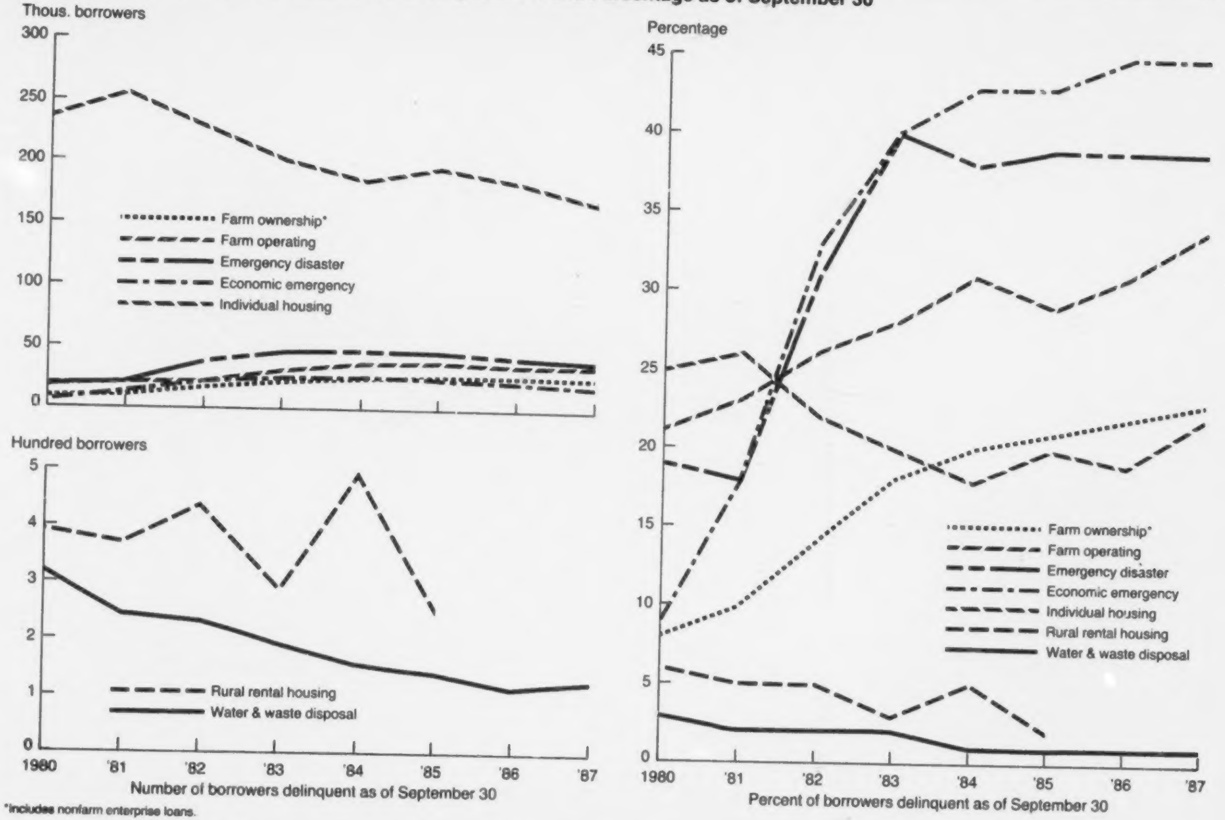
Table 3--FmHA statistics

	Number of active borrowers as of end of fiscal year*			Total number of loans and grants made
	Indiv.	Assoc.	Total	
1967	324,418	3,909	328,327	169,630
1968	377,857	5,088	382,945	155,521
1969	418,167	6,233	424,400	148,414
1970	470,267	6,973	477,240	149,407
1971	548,143	7,556	555,699	191,913
1972	627,744	8,151	635,895	190,188
1973	710,980	8,705	719,653	318,587
1974	750,421	9,000	759,421	189,437
1975	844,527	9,997	854,524	216,852
1976	908,723	11,317	920,040	197,949
1977	967,066	12,945	980,011	222,684
1978	1,040,207	14,412	1,054,619	283,696
1979	1,108,353	16,173	1,124,526	294,890
1980	1,167,006	18,235	1,185,241	274,990
1981	1,228,277	19,929	1,248,206	319,045
1982	1,250,433	21,834	1,272,267	190,555
1983	1,252,449	23,271	1,275,720	153,561
1984	1,250,340	24,658	1,274,998	175,895
1985	1,245,512	12,906	1,258,418	170,933
1986**	1,202,723	12,996	1,215,719	121,498
1987**	1,000,268	12,415	1,012,683	94,917

* Guaranteed loans not included.
** Excludes Rural Rental Housing borrowers.

Figure 4

Borrowers Delinquent, Major Loan Programs, By Number and Percentage as of September 30



*Includes nonfarm enterprise loans.

Table 4--Borrowers delinquent, major loan programs, by number and percentage as of September 30

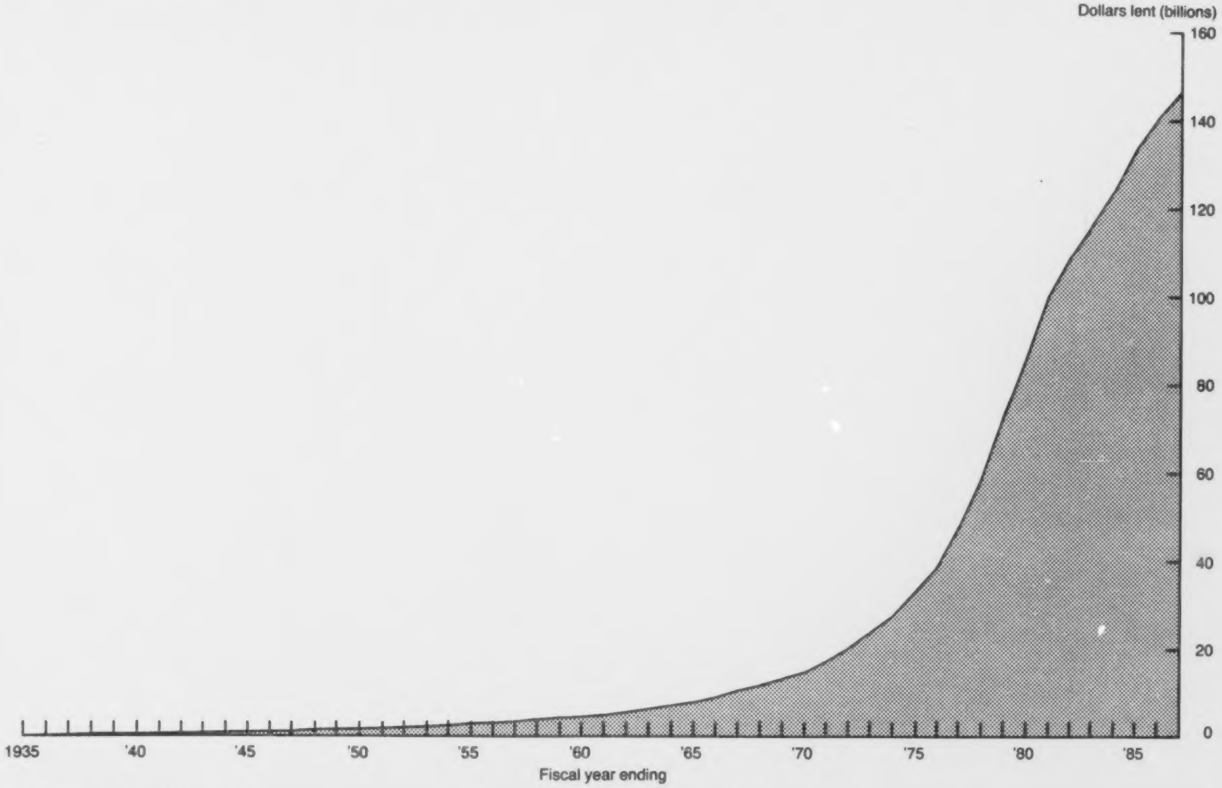
	1980		1981		1982		1983		1984		1985		1986		1987	
	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%
Farm Ownership*	9,209	8	11,711	10	17,068	14	22,090	18	25,595	20	26,352	21	27,599	22	26,989	23
Farm Operating	18,248	21	21,442	23	21,511	26	31,355	28	37,286	31	38,385	29	37,242	31	36,516	34
Emergency Disaster	17,296	19	22,338	18	38,556	31	46,714	40	48,172	38	47,276	39	43,534	39	40,297	39
Economic Emergency	5,560	9	12,509	18	21,514	33	25,049	40	25,768	43	24,245	43	21,612	45	19,483	45
Individual Housing	235,406	25	253,986	26	226,550	22	201,902	20	185,853	18	197,708	20	187,722	19	169,546	22
Rural Rental Housing**	393	6	373	5	434	5	288	3	495	5	256	2	**		**	
Water & Waste Disposal	321	3	243	2	232	2	192	2	158	1	141	1	115	1	125	1

* Includes nonfarm enterprise loans.

** Information is not currently available.

Figure 5

Dollars Loaned and Grants Administered (Cumulative)



Note: Amounts will not equal due to rounding.

Table 5--Dollars loaned and grants administered (cumulative)

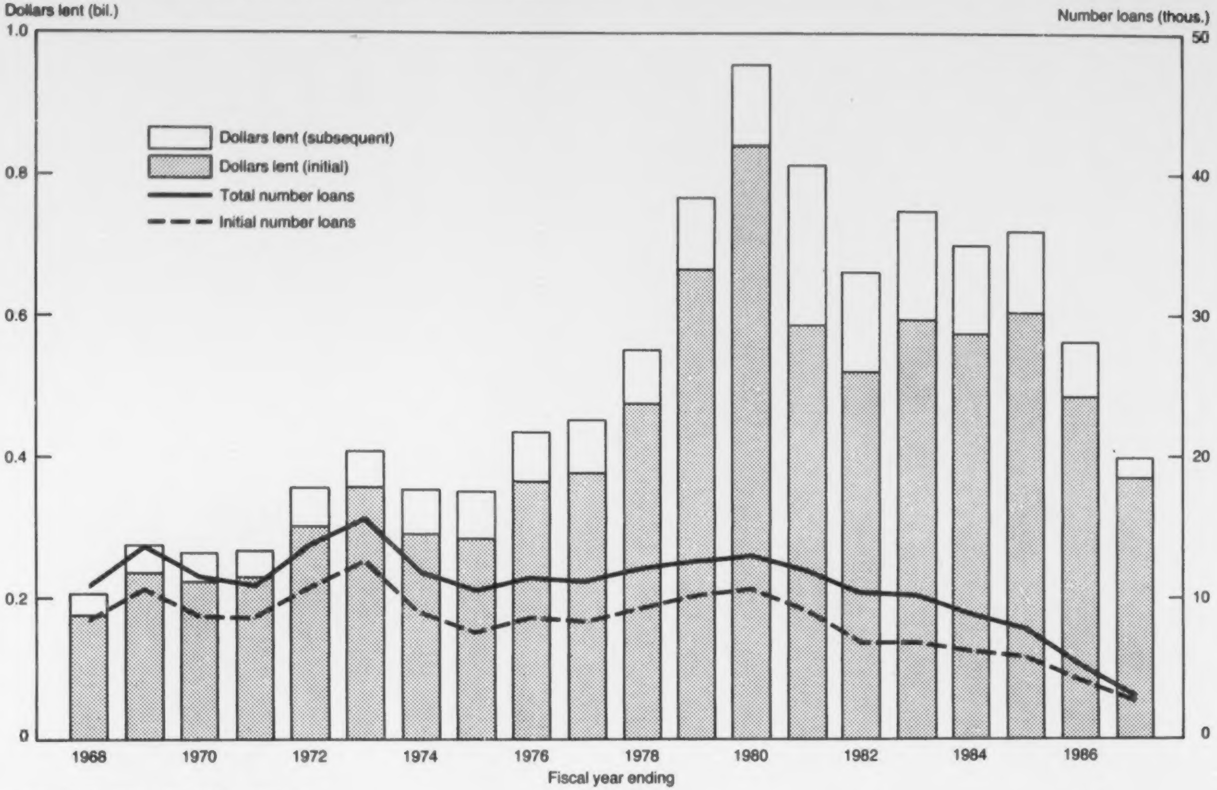
	Farm (Thousands)	Housing (Thousands)	Community (Thousands)	Total dollars* (Thousands)
1935	676			676
1936	76,964			76,964
1937	152,466			152,466
1938	232,770			232,770
1939	376,552			376,552
1940	511,576		2	511,578
1941	677,655		56	677,711
1942	854,019		134	854,153
1943	988,046		149	988,195
1944	1,082,514		149	1,082,663
1945	1,167,454		232	1,167,686
1946	1,295,580		381	1,295,961
1947	1,445,061		501	1,445,562
1948	1,528,128		661	1,528,789
1949	1,646,632		754	1,647,386
1950	1,809,284	18,161	1,013	1,828,457
1951	1,961,699	42,253	1,563	2,005,515
1952	2,152,421	63,408	1,961	2,217,789
1953	2,360,918	82,765	2,800	2,446,484
1954	2,636,422	98,833	3,676	2,738,932
1955	2,928,478	98,833	4,863	3,032,174
1956	3,231,423	102,554	5,835	3,339,812
1957	3,565,721	123,845	6,542	3,696,108
1958	3,861,819	156,911	7,540	4,026,270
1959	4,159,454	217,585	10,859	4,387,899
1960	4,426,742	258,321	11,707	4,696,771
1961	4,746,439	328,662	17,353	5,092,454
1962	5,273,854	425,160	30,856	5,729,870
1963	5,864,145	612,900	49,010	6,526,054
1964	6,428,571	750,243	95,034	7,273,848
1965	7,026,754	885,206	161,965	8,073,925
1966	7,692,062	1,153,755	316,793	9,162,610
1967	8,402,694	1,596,875	554,130	10,553,698
1968	9,040,063	2,089,911	781,816	11,911,789
1969	9,740,957	2,602,000	1,000,757	13,343,714
1970	10,383,687	3,395,835	1,203,942	14,983,463
1971	11,079,895	4,794,932	1,522,952	17,397,779
1972	11,898,367	6,413,709	1,875,510	20,187,585
1973	13,330,329	8,277,018	2,335,172	23,942,520
1974	14,353,648	10,070,346	3,120,000	27,543,994
1975	16,362,179	12,315,226	4,352,679	33,030,084
1976	18,187,039	14,840,862	5,412,773	38,440,675
1976 + TQ**	18,561,883	15,751,596	5,907,085	40,220,565
1977	20,994,914	18,897,401	7,583,784	47,476,099
1978	25,990,776	22,658,749	9,937,676	58,587,201
1979	33,696,244	26,945,340	12,547,252	73,188,836
1980	40,045,519	31,166,003	15,065,002	86,276,524
1981	48,119,358	35,109,573	17,022,630	100,251,561
1982	52,233,221	38,995,501	17,801,056	109,029,778
1983	55,303,948	42,102,223	18,938,102	116,344,273
1984	59,741,919	45,017,021	19,580,426	124,339,366
1985	65,671,301	47,940,830	20,238,900	133,851,031
1986	70,029,242	49,977,124	20,845,672	140,852,039
1987	73,087,828	52,016,347	21,528,978	146,633,184

*Figures do not include $89,800,000 for certain discontinued programs listed on page 21 for all-time totals.

**Transition Quarter (TQ) for change of fiscal year.

Figure 6

Farm Ownership Loan Program: Number of Loans and Dollars Lent*



*Includes direct loan costs. Excludes insured loan costs.

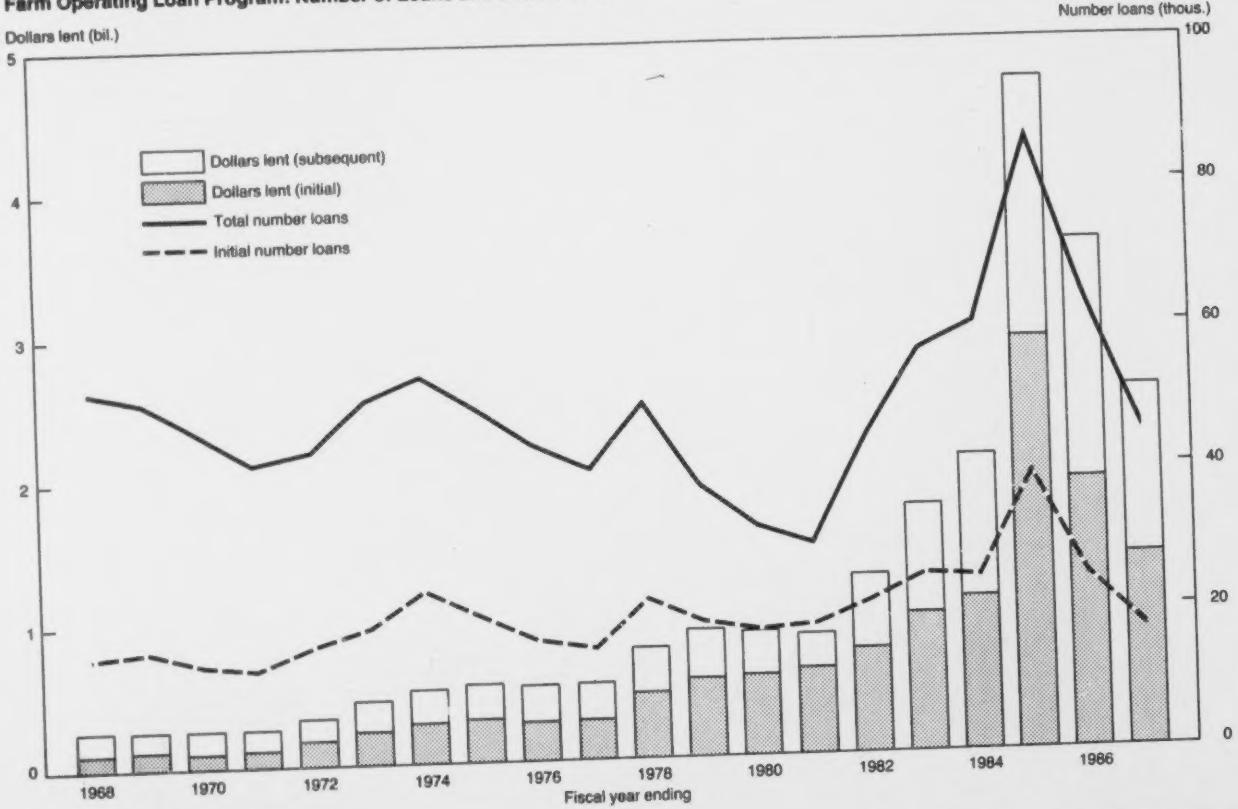
Table 6--Farm ownership loan program:
Number of loans and dollars lent*

	Initial loans		Subsequent loans		Total loans	
	Number	Amount	Number	Amount	Number	Amount
1968	8,403	$176,289,150	2,411	$ 28,709,744	10,814	$204,998,894
1969	10,525	237,047,040	3,177	40,073,052	13,702	277,120,092
1970	8,644	222,949,520	2,841	38,547,055	11,491	261,496,575
1971	8,522	230,560,910	2,434	37,875,258	10,956	268,436,168
1972	10,718	302,220,690	3,037	53,541,329	13,755	355,762,019
1973	12,593	356,058,150	2,899	52,059,220	15,492	408,117,370
1974	8,728	291,482,260	3,269	60,679,170	11,997	352,161,430
1975	7,550	286,608,341	3,048	65,024,420	10,598	351,632,761
1976	8,583	367,204,570	2,788	67,800,228	11,371	435,004,798
1977	8,353	378,916,850	2,769	72,323,130	11,122	451,239,980
1978	9,384	474,266,230	2,631	76,580,270	12,015	550,846,500
1979	10,179	667,699,570	2,389	95,465,200	12,568	768,164,770
1980	10,616	842,738,150	2,356	111,313,930	12,972	954,052,080
1981	9,014	588,163,820	2,839	125,121,290	11,853	813,285,110
1982	6,821	520,994,148	3,409	140,609,190	10,230	661,603,338
1983	6,902	593,863,120	3,296	155,716,260	10,198	749,579,380
1984	6,140	574,859,470	2,577	125,836,390	8,717	700,695,860
1985	5,826	605,723,184	2,051	114,795,574	7,877	720,518,758
1986	4,155	487,403,660	1,142	76,002,880	5,297	563,406,540
1987	2,649	370,861,170	384	28,557,200	3,033	399,418,370

* Includes direct loan costs.
Excludes insured loan costs.

Figure 7

Farm Operating Loan Program: Number of Loans and Dollars Lent*



*Includes direct loan costs. Excludes insured loan costs.

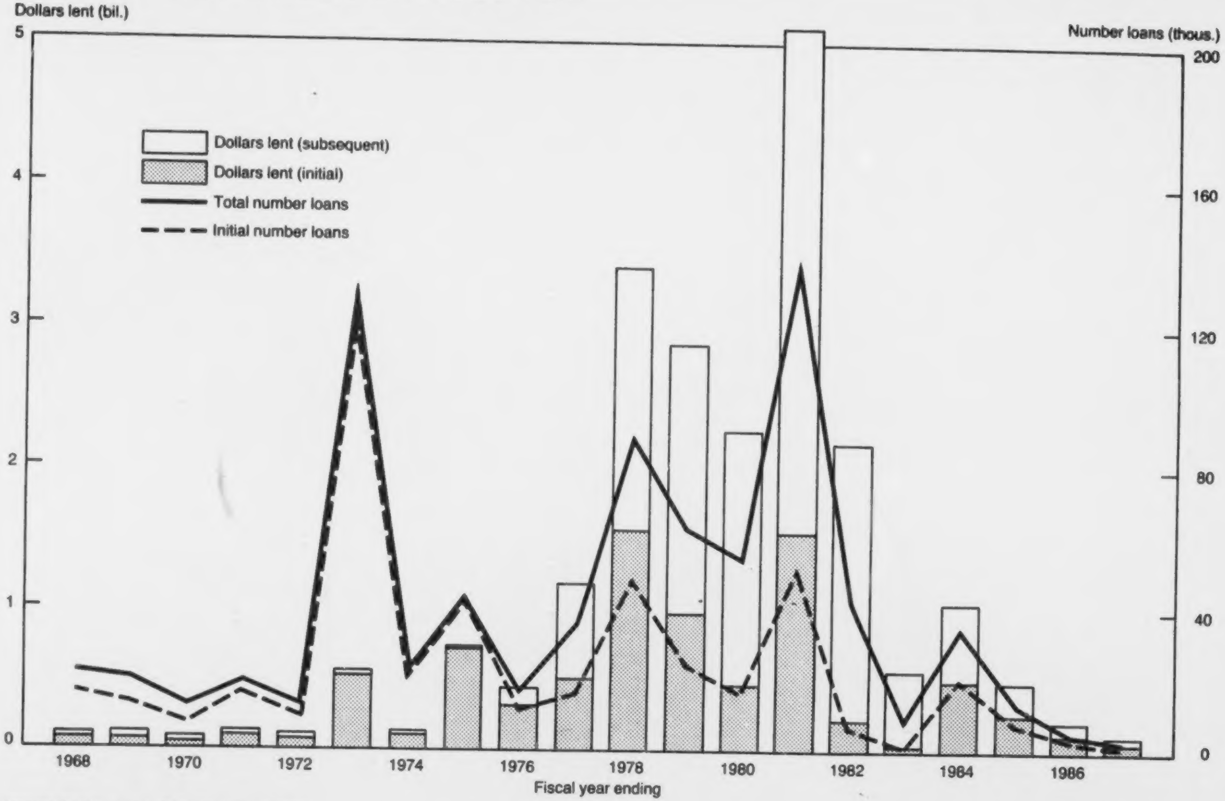
Table 7--Farm operating loan program:
Number of loans and dollars lent*

	Initial loans		Subsequent loans		Total loans	
	Number	Amount	Number	Amount	Number	Amount
1968	15,784	$119,917,490	36,537	$155,082,510	52,321	$275,000,000
1969	16,234	127,094,340	34,577	147,905,630	50,811	274,999,970
1970	14,247	114,416,920	32,410	160,583,048	46,657	274,999,968
1971	13,635	125,499,360	28,545	149,500,631	42,180	274,999,991
1972	16,649	181,229,350	27,196	156,056,468	43,845	337,285,818
1973	19,172	237,329,750	31,808	217,314,627	50,980	454,644,377
1974	23,965	282,416,201	29,900	242,577,627	53,865	524,993,821
1975	20,560	302,266,678	28,694	248,520,072	49,254	550,786,750
1976	17,172	279,529,768	26,876	259,687,665	44,048	539,217,433
1977	15,709	283,770,260	24,830	258,573,030	40,539	542,343,290
1978	22,176	466,642,040	27,238	313,985,760	49,414	780,627,800
1979	19,079	552,541,730	18,863	342,212,170	37,942	894,753,900
1980	17,568	565,596,300	14,643	309,232,700	32,211	874,829,000
1981	18,157	605,727,550	11,681	241,875,810	29,838	847,603,360
1982	21,310	734,338,846	23,609	516,669,953	44,919	1,251,008,799
1983	25,108	972,214,470	31,452	763,332,830	56,560	1,735,547,300
1984	24,679	1,076,177,210	35,488	994,976,830	60,167	2,071,154,040
1985	39,081	2,903,823,556	47,116	1,802,993,963	86,197	4,706,817,519
1986	24,452	1,900,658,503	39,794	1,669,793,289	64,246	3,570,451,792
1987	17,298	1,364,380,160	28,411	1,174,620,350	45,709	2,539,000,510

* Includes direct loan costs.
Excludes insured loan costs.

Figure 8

Emergency Loan Program: Number of Loans and Dollars Lent*



*Includes direct loan costs. Excludes insured loan costs.

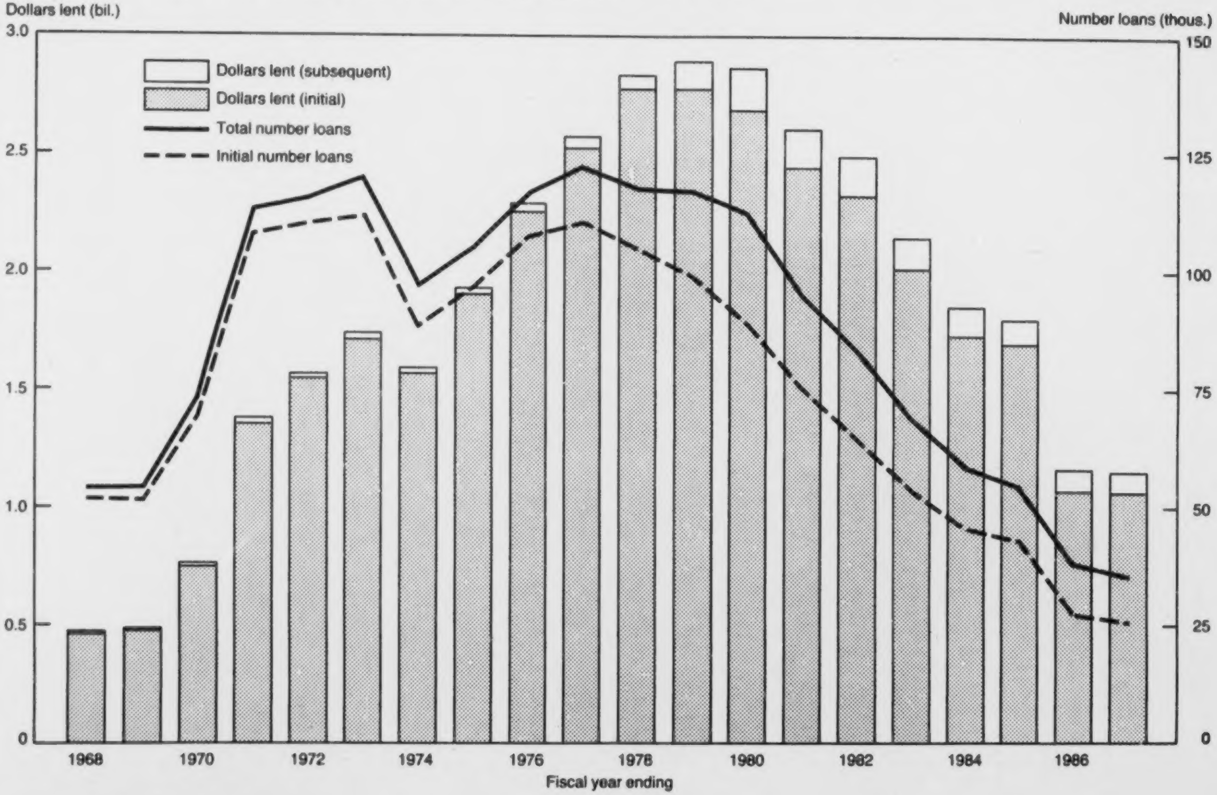
Table 8--Emergency loan program:
Number of loans and dollars lent*

	Initial loans		Subsequent loans		Total loans	
	Number	Amount	Number	Amount	Number	Amount
1968	16,124	$ 77,528,270	6,104	$ 30,646,155	22,228	$ 108,174,425
1969	13,509	75,427,940	7,177	39,288,213	20,686	114,716,153
1970	7,800	56,364,080	4,978	33,066,080	12,778	89,430,160
1971	16,025	101,216,425	3,779	26,419,481	19,804	127,635,906
1972	9,716	83,420,630	3,263	25,491,179	12,979	108,911,809
1973	124,783	527,727,353	3,884	30,039,242	128,667	557,766,595
1974	22,016	117,361,657	418	10,975,112	22,434	128,336,769
1975	42,976	722,263,783	699	12,756,754	43,675	735,020,537
1976	11,880	321,395,514	4,998	156,316,305	16,878	447,711,819
1977	16,666	515,709,080	19,103	662,678,900	35,769	1,178,387,980
1978	48,166	1,558,223,570	40,953	1,853,584,630	89,119	3,411,808,200
1979	24,838	970,026,080	38,075	1,901,615,680	62,913	2,871,641,760
1980	16,127	473,962,490	38,267	1,792,927,830	54,394	2,266,890,320
1981	51,871	1,550,820,070	87,119	3,561,470,360	138,990	5,112,290,430
1982	6,101	222,528,630	36,762	1,950,883,570	42,863	2,173,412,200
1983	1,027	43,478,210	7,744	522,459,290	8,771	565,937,500
1984	20,437	499,991,230	14,560	551,635,930	34,997	1,051,627,160
1985	8,010	261,187,150	6,050	229,689,488	14,060	490,876,638
1986	3,318	128,380,750	2,266	89,393,280	5,584	217,774,030
1987	1,427	68,566,960	1,121	45,045,940	2,548	113,612,900

* Includes direct loan costs.
Excludes insured loan costs.

Figure 9

Rural Housing 502 and 504 Loans to Individuals: Number of Loans and Dollars Lent*



*Includes direct loan costs. Excludes insured loan cost.

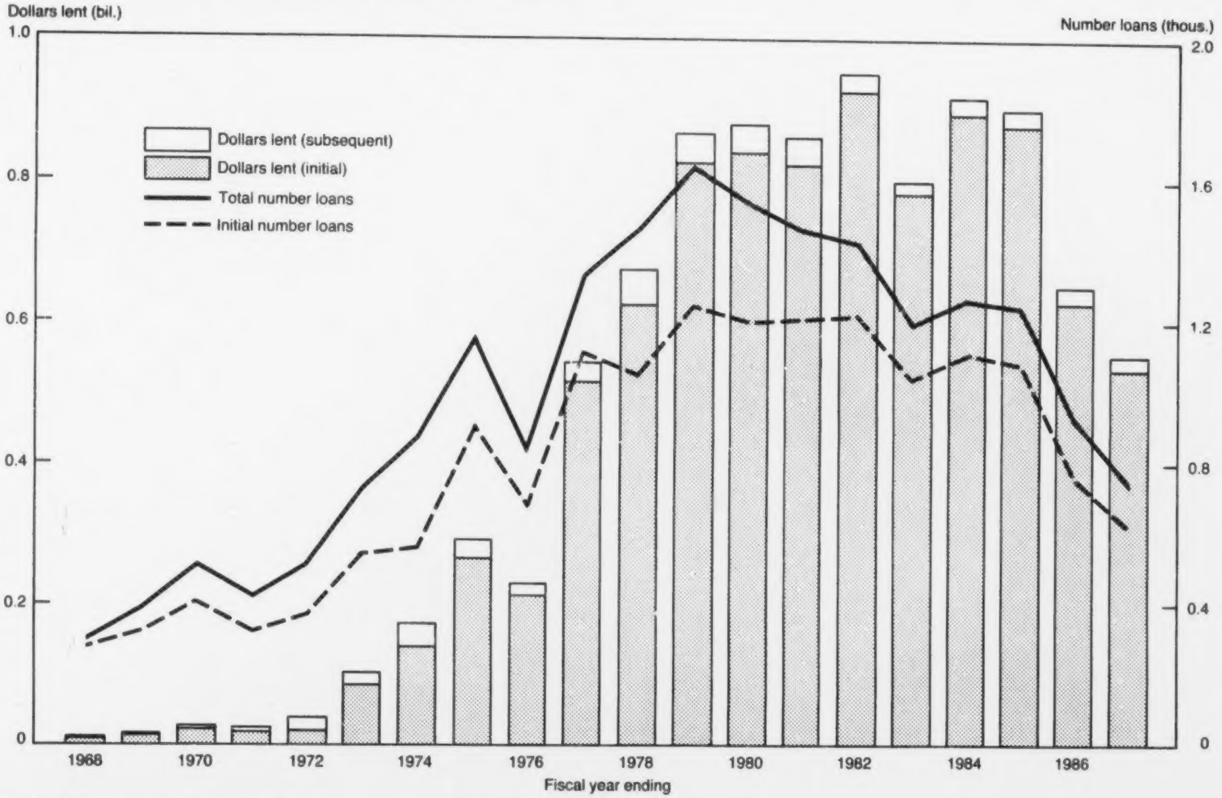
Table 9—Rural housing 502 and 504 loans to individuals:
Number of loans and dollars lent*

	Initial loans		Subsequent loans		Total loans	
	Number	Amount	Number	Amount	Number	Amount
1968	51,970	$ 468,185,434	2,357	$ 5,479,564	54,327	$ 437,664,998
1969	51,560	480,363,630	2,878	5,857,314	54,438	486,220,944
1970	69,423	750,919,400	3,928	10,677,131	73,351	761,596,531
1971	108,188	1,353,830,290	5,276	13,937,662	113,464	1,376,767,952
1972	110,097	1,549,571,250	5,888	17,048,825	115,985	1,566,620,075
1973	111,779	1,712,380,440	8,004	27,875,832	119,783	1,740,256,272
1974	88,728	1,569,628,860	8,278	24,684,069	97,006	1,594,312,929
1975	96,688	1,903,281,940	8,382	28,169,930	105,070	1,931,451,870
1976	107,514	2,256,680,464	9,544	35,892,200	117,058	2,292,572,664
1977	110,543	2,528,014,600	11,534	48,612,460	122,136**	2,576,675,030**
1978	104,869	2,778,813,490	12,000	56,578,350	117,382**	2,703,242,438**
1979	98,987	2,778,813,490	17,423	114,040,970	117,206**	2,893,558,790**
1980	89,181	2,687,208,580	21,709	178,072,090	112,391**	2,866,530,690**
1981	75,002	2,446,551,790	18,212	160,648,300	94,895**	2,608,876,334**
1982	64,728	2,323,295,534	17,319	163,164,721	83,614**	2,488,262,514**
1983	53,913	2,013,224,690	13,842	130,977,150	68,727**	2,145,352,859**
1984	45,536	1,729,388,690	12,950	121,821,120	58,486	1,851,309,810
1985	43,116	1,695,400,169	11,498	102,049,526	54,614	1,797,449,695
1986	27,492	1,065,721,240	11,087	96,617,901	38,579	1,162,339,141
1987	25,779	1,062,929,869	9,799	86,843,715	35,578	1,149,773,584

* Includes direct loan costs, excludes insured loan cost.
** Includes 7,089 weatherization loans for $7,079,670 made between 1977 and 1983.

Figure 10

Rural Rental Housing Program: Number of Loans and Dollars Lent*



*Includes direct loan costs. Excludes insured loan costs.

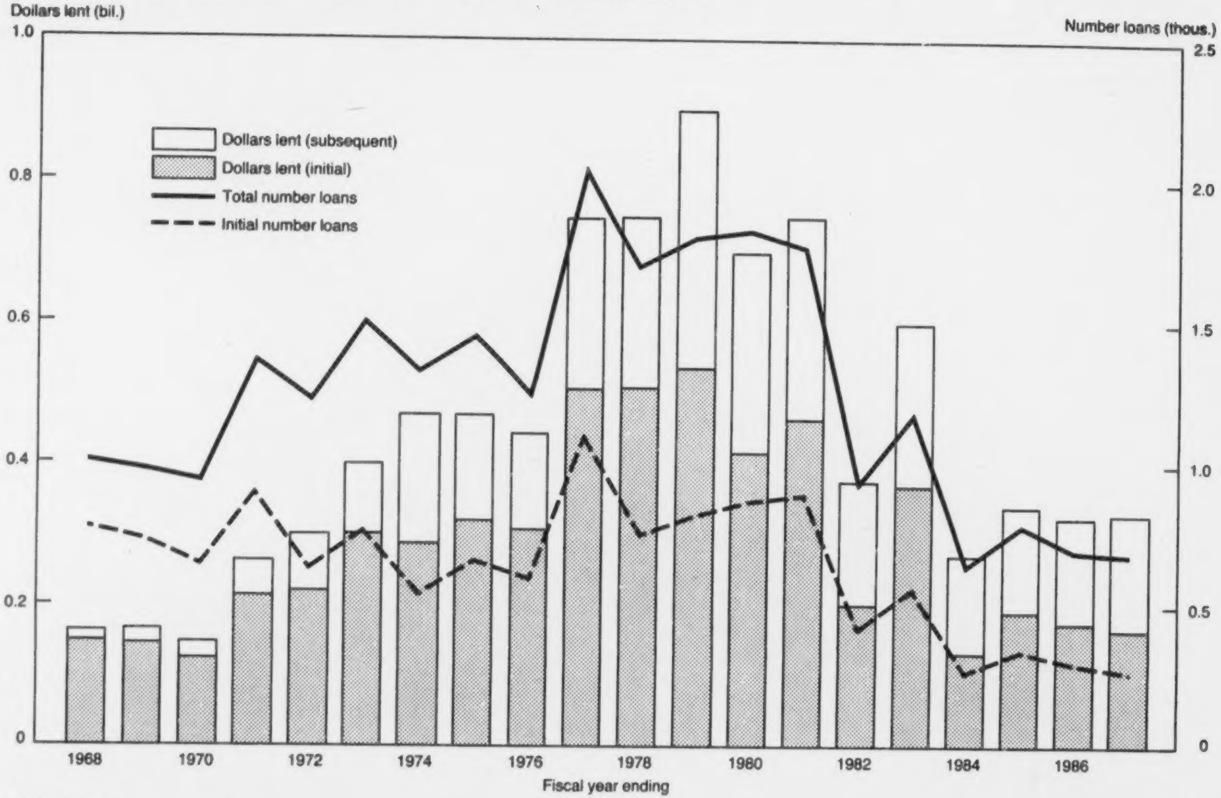
Table 10--Rural rental housing program:
Number of loans and dollars lent*

	Initial loans		Subsequent loans		Total loans	
	Number	Amount	Number	Amount	Number	Amount
1968	276	$ 12,427,010	21	$ 748,890	297	$ 13,175,900
1969	329	15,351,280	61	1,983,220	390	17,334,500
1970	412	24,148,230	98	4,292,510	510	28,440,740
1971	325	21,012,400	97	5,776,290	422	26,788,690
1972	372	21,502,910	143	8,614,970	515	40,117,880
1973	546	87,886,880	184	17,175,750	730	105,062,630
1974	562	140,663,110	317	32,650,920	879	173,314,030
1975	903	267,036,590	205	25,319,750	1,153	292,356,340
1976	685	213,992,470	153	17,209,680	838	231,202,150
1977	1,114	518,017,210	222	26,936,970	1,336	544,954.180
1978	1,056	627,442,260	410	48,502,290	1,466	675,944,550
1979	1,247	827,894,470	398	41,614,090	1,645	869,508,560
1980	1,204	841,524,090	335	39,812,050	1,539	881,336,140
1981	1,213	825,921,420	253	38,843,810	1,466	864,765,230
1982	1,220	928,339,980	208	25,327,740	1,428	953,667,720
1983	1,043	783,730,240	152	18,267,160	1,195	801,997,400
1984	1,109	897,327,330	155	21,674,680	1,264	919,002,010
1985	1,085	880,801,618	156	22,534,750	1,242	903,336,368
1986	758	629,498,490	163	22,849,588	921	652,348,078
1987	618	533,615,900	126	21,282,908	744	554,898,880

* Includes direct loan costs.
Excludes insured loan cost.

Figure 11

Water and Waste Disposal Loan Program: Number of Loans and Dollars Lent*



*Includes loan costs.

Table 11--Water and waste disposal loan program:
Number of loans and dollars lent*

	Initial loans		Subsequent loans		Total loans	
	Number	Amount	Number	Amount	Number	Amount
1968	775	$149,802,640	241	$ 12,789,710	1,016	$162,592,350
1969	739	147,036,310	242	17,610,850	981	164,647,160
1970	647	123,183,450	294	22,847,040	941	146,030,490
1971	899	213,092,800	468	48,611,100	1,367	261,703,900
1972	631	220,777,500	595	79,221,500	1,226	299,999,000
1973	768	300,182,500	734	99,812,300	1,502	399,994,800
1974	546	288,354,157	779	181,644,943	1,325	469,999,100
1975	658	320,188,646	793	149,798,300	1,451	469,986,946
1976	597	308,206,748	648	134,435,086	1,245	442,641,834
1977	1,097	508,238,060	951	240,612,370	2,048	748,850,430
1978	756	509,133,100	946	240,862,700	1,702	749,995,800
1979	823	537,351,830	979	362,648,090	1,802	899,999,920
1980	869	418,664,010	956	281,335,690	1,825	699,999,700
1981	892	466,061,480	876	283,938,500	1,768	749,999,980
1982	423	202,338,450	505	172,661,550	928	375,000,000
1983	558	370,751,900	626	229,248,100	1,184	600,000,000**
1984	259	132,273,600	386	137,726,400	645	270,000,000
1985	343	191,386,700	440	148,613,300	783	340,000,000
1986	291	176,045,700	407	149,334,300	698	325,380,000
1987	267	165,156,280	412	165,223,720	679	330,380,000

* Includes loan costs.
** Includes $225,000,000 under the Emergency Jobs Bill in FY 1983.

Figure 12

Community Facility Loan Program: Number of Loans and Dollars Lent

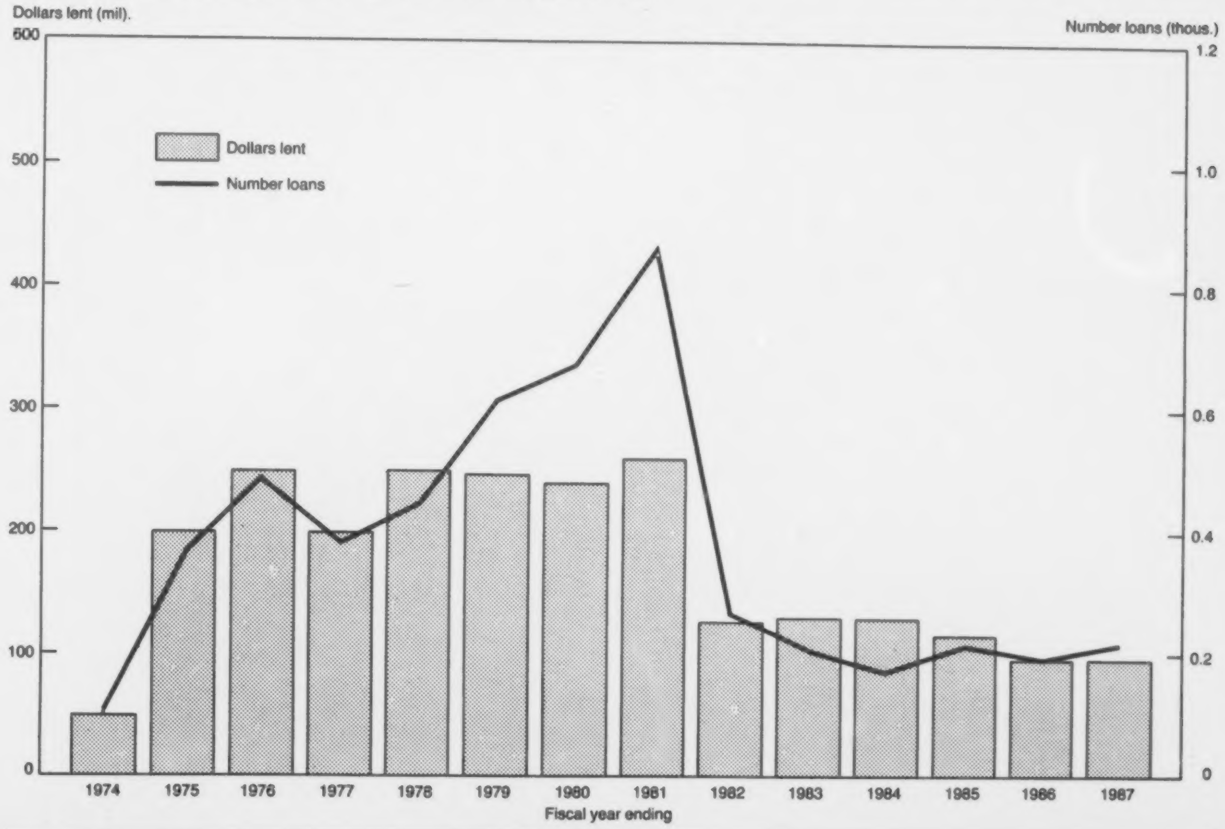


Table 12--Community facility loan program:
Number of loans and dollars lent

Fiscal Year	Number	Amount
1974	102	$ 49,830,700
1975	359	199,998,000
1976 + TQ*	485	249,995,600
1977	382	199,980,800
1978	447	249,997,000
1979	615	246,998,620
1980	674	240,000,000
1981	862	260,000,000
1982	267	126,191,250
1983	208	130,000,000
1984	173	129,998,500
1985	214	115,000,000
1986	192	95,700,000
1987	217	95,700,000

* Transition Quarter (TQ) for change of fiscal year.

Figure 13

Business and Industrial Development Loan Program: Number of Loans and Dollars Lent

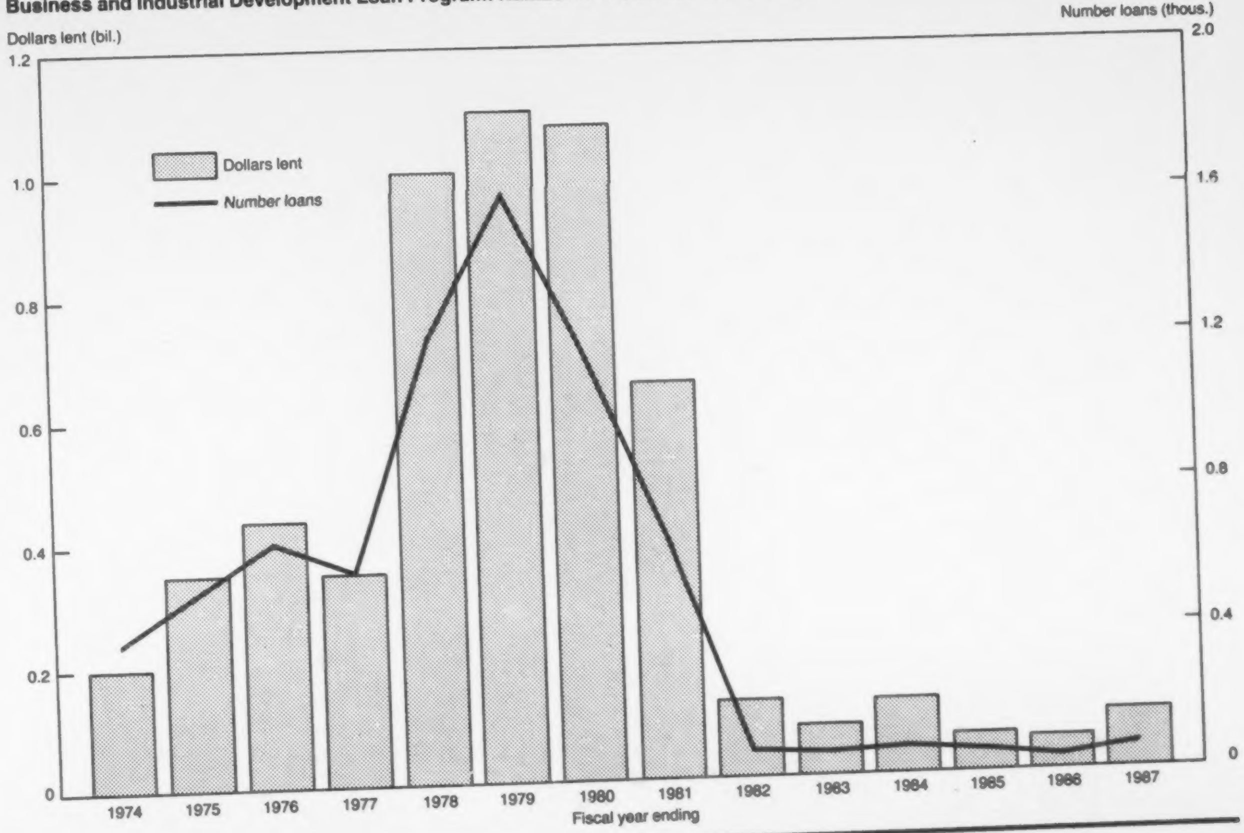


Table 13--Business and industrial development loan program: Number of loans and dollars lent

Fiscal Year	Number	Amount
1974	399	$ 199,980,545*
1975	538	349,994,173*
1976 & TQ****	663	437,498,741*
1977	584	349,987,010*
1978	1,213	999,978,030*
1979	1,609	1,097,376,903**
1980	1,160	1,073,766,920***
1981	638	652,280,250***
1982	74	125,077,575***
1983	64	81,911,810***
1984	75	124,352,250***
1985	54	61,337,500***
1986	37	54,802,600***
1987	67	95,699,770***

* Amount obligated is based on total amounts shown on face of note for all guaranteed loans.

** Amount obligated based on 90% guarantee rate of the loan.

*** Amount obligated based on actual percentage of guarantee of total loan.

**** Transition Quarter (TQ) for change of fiscal year.

FmHA State Office Locations

ALABAMA
Rm. 717, Aronov Building
474 South Court Street
Montgomery, Alabama 36104

ALASKA
Tu'l Building, Palmer Business Plaza
P.O. Box 819
Palmer, Alaska 99645

ARIZONA
201 East Indianola, Suite 275
Phoenix, Arizona 85012

ARKANSAS
Rm. 5529, Federal Building
700 West Capitol
P.O. Box 2778
Little Rock, Arkansas 72203

CALIFORNIA
194 West Main Street, Suite F
Woodland, California 95695-2915

COLORADO
Rm. 231, #1 Diamond Plaza
2490 West 26th Avenue
Denver, Colorado 80211

DELAWARE, DISTRICT OF COLUMBIA, MARYLAND
2319 South Dupont Highway
Dover, Delaware, 19901

FLORIDA
Rm. 214, Federal Building
401 SE. 1st Avenue
P.O. Box 1088
Gainesville, Florida 32602-6805

GEORGIA
Stephens Federal Building
355 East Hancock Avenue
Athens, Georgia 30610

HAWAII
Rm. 311 Federal Building
154 Waianuenue Avenue
Hilo, Hawaii 96720

IDAHO
Rm. 429, Federal Building
304 North Eighth Street
Boise, Idaho 83702

ILLINOIS
1817 South Neil Street
Champaign, Illinois 61820

INDIANA
Suite 1700
5610 Crawfordsville Road
Indianapolis, Indiana 46224

IOWA
Rm. 873, Federal Building
210 Walnut Street
Des Moines, Iowa 50309

KANSAS
Rm. 176, Federal Building
444 SE . Quincy Street
Topeka, Kansas 66683

KENTUCKY
333 Waller Avenue
Lexington, Kentucky 40504

LOUISIANA
3727 Government Street
Alexandria, Louisiana 71302

MAINE
USDA Office Building
Orono, Maine 04473

MASSACHUSETTS, CONNECTICUT, RHODE ISLAND
451 West Street
Amherst, Massachusetts 01002

MICHIGAN
Rm. 209, Manly Miles Building
1405 South Harrison Road
East Lansing, Michigan 48823

MINNESOTA
252 Federal Office Building &
U.S. Courthouse
316 North Robert Street
St. Paul, Minnesota 55101

MISSISSIPPI
Rm. 831, Federal Building
Jackson, Mississippi 39269

MISSOURI
555 Vandiver Drive
Columbia, Missouri 65202

MONTANA
Rm. 234, Federal Building
P.O. Box 850
Bozeman, Montana 59715

NEBRASKA
Rm. 308, Federal Building
100 Centennial Mall North
Lincoln, Nebraska 68508

NEW JERSEY
Suite 100, 100 High Street
Mt. Holly, New Jersey 08060

NEW MEXICO
Rm. 3414, Federal Building
517 Gold Avenue, SW.
Albuquerque, New Mexico 87102

NEW YORK
Rm. 871
James M. Hanley Federal Building
100 South Clinton Street
Syracuse, New York 13260

NORTH CAROLINA
Rm. 525
310 New Bern Avenue
Raleigh, North Carolina 27601

NORTH DAKOTA
Rm. 208, Federal Building
Third and Rosser, P.O. Box 1737
Bismarck, North Dakota 58502

OHIO
Rm. 507, Federal Building
200 North High Street
Columbus, Ohio 43215

OKLAHOMA
USDA Agricultural Center Building
Stillwater, Oklahoma 74074

OREGON
Rm. 1590, Federal Building
1220 SW. 3rd Avenue
Portland, Oregon 97204

PENNSYLVANIA
Federal Building, Rm. 728
P.O. Box 905
Harrisburg, Pennsylvania 17108

PUERTO RICO
Rm. 623, Federal Building
Carlos Chardon St.
Hato Rey, Puerto Rico 00918

SOUTH CAROLINA
Rm. 1007
Strom Thurmond Federal Building,
1835 Assembly Street
Columbia, South Carolina 29201

SOUTH DAKOTA
Huron Federal Building, Rm. 308
200 4th Street, S.W.
Huron, South Dakota 57350

TENNESSEE
538 Federal Building & U.S. Court House
801 Broadway
Nashville, Tennessee 37203

TEXAS
Suite 102, Federal Building
101 South Main
Temple, Texas 76501

UTAH, NEVADA
Rm. 5438, Federal Building
125 South State Street
Salt Lake City, Utah 84138

VERMONT, NEW HAMPSHIRE, VIRGIN ISLANDS
141 Main Street
P.O. Box 588
Montpelier, Vermont 05602

VIRGINIA
Rm. 8217, Federal Building
400 North Eighth Street,
P.O. Box 10106
Richmond, Virginia 23240

WASHINGTON
Rm. 319, Federal Building
P.O. Box 2427
Wenatchee, Washington 98801

WEST VIRGINIA
75 High Street
P.O. Box 678
Morgantown, West Virginia 26505

WISCONSIN
Suite 209, 1st Financial Plaza
1257 Main Street
Stevens Point, Wisconsin 54481

WYOMING
Rm. 1005 Federal Building
P.O. Box 820
Casper, Wyoming 82602

NATIONAL OFFICE
U.S. Department of Agriculture
Farmers Home Administration
Washington, D.C. 20250

FEDERAL CROP INSURANCE CORPORATION

STATEMENTS OF:

ROLAND R. VAUTOUR, UNDER SECRETARY FOR SMALL COMMUNITY AND RURAL DEVELOPMENT, DEPARTMENT OF AGRICULTURE

JOHN MARSHALL, MANAGER, FEDERAL CROP INSURANCE CORPORATION

ACCOMPANIED BY:

EDWARD D. HEWS, DEPUTY MANAGER, FEDERAL CROP INSURANCE CORPORATION

STEPHEN B. DEWHURST, BUDGET OFFICER, DEPARTMENT OF AGRICULTURE

INTRODUCTION OF WITNESS

Senator BURDICK. I think we will return to you, Mr. Vautour, for further testimony on the Federal Crop Insurance Corporation.

STATEMENT OF ROLAND VAUTOUR

Mr. VAUTOUR. Thank you, Senator.

It is my pleasure to appear before this committee on behalf of the Federal Crop Insurance Corporation.

The Federal Crop Insurance Corporation, as you know, is a wholly owned government corporation that has been providing farmers with multiple-peril crop insurance since 1938.

The stated purpose of the Corporation is to promote the national welfare by improving the economic stability of agriculture through a sound system of crop insurance. Our program legislation was amended in 1980 to provide for nationwide expansion of a comprehensive crop insurance program as a viable and realistic risk management tool.

The Federal Crop Insurance Corporation program provides a cost-sharing insurance program for agriculture producers to reduce losses resulting from decreased crop production caused by unavoidable events of nature.

The crop insurance program constitutes a joint effort by the private sector and the government in the delivery of the program. The 1980 amendment urged the use of the private sector, "to the maximum extent practicable" and virtually all sales and service is now accomplished through a unique public and private partnership. In some cases, this partnership involves private sector sales combined with federal underwriting and claims service; in others, we use the reinsurance process to involve risk-bearing insurance companies in the direct sales and service.

In view of the repeated and continuing emphasis on crop insurance as the federal government's agriculture catastrophic risk management program, I want to assure the committee and the Congress that the Department of Agriculture will utilize the resources of all of our agencies to assure that producers are aware of the program and have the opportunity to utilize it.

This concludes my statement, and I will now turn to Mr. John Marshall, the new Manager of the Federal Crop Insurance Corporation, to provide details of the Corporation's fiscal year 1989 budget.

STATEMENT OF JOHN MARSHALL

Senator BURDICK. Thank you very much. Mr. Marshall, do you have a statement?

Mr. MARSHALL. Thank you, Mr. Chairman and members of the subcommittee. It is a pleasure for me to appear here today to present the 1989 budget for the Federal Crop Insurance Corporation. As you have a written copy of my statement, I will summarize for you some of the highlights of our 1989 budget and program experience.

1989 BUDGET REQUEST

Our budget request for fiscal year 1989 includes the following amounts: $217.9 million for administrative and operating expenses to fund the expanded Crop Insurance Program; about $132.5 million of this will be required for reinsurance administrative expenses, and $24.4 million for master marketing expenses and loss adjustment functions. Also included is $2.5 million to be reimbursed to ASCS for services performed under our national agreement.

These amounts total $159.4 million and account for more than 73 percent of the Corporation's total request for administrative and operating expenses. We are also asking for $112 million for premium subsidies for fiscal year 1989. This amount will provide for a maximum expansion of the Crop Insurance Program to an estimated 61.2 million insured acres.

We are also requesting $100 million authority from Commodity Credit Corporation funds as a reserve against heavy unforeseen and unavoidable losses for crop years 1988 and 1989. This total budget request for 1989 amounts to $430 million for ongoing programs. The total for fiscal year 1989 is only about 3 percent, or $1.4 million higher, than the total 1988 appropriations for ongoing programs.

Within the administrative and operating expenses, our requested amounts will allow the Corporation to continue expansion of the Crop Insurance Program. Resources are requested to expand coverage from the crop year 1987 level of 50 million insured acres to 57.8 million insured acres for 1988 and 61.2 million acres for 1989.

We are using two basic forms of program delivery, reinsured companies and master marketers under the agency sales and service contract. For 1988, we have increased the responsibilities of both systems by improving procedural requirements and adding to the risk retention levels for reinsured companies and by imposing electronic transfer responsibilities as well as establishing minimum premium level requirements to assure a sound business foundation for the master marketers.

USE OF COMMODITY CREDIT CORPORATION FUNDS

FCIC has no plans to use the funds of the Commodity Credit Corporation in 1988. We have reflected the $100 million for 1989 as a hedge against unavoidable losses in crop years 1988 and 1989.

UPDATE ON CROP YEAR 1987

Federal crop insurance is intended to become the primary form of federal disaster protection for farmers and eventually replace the current and emergency legislated farm disaster programs. Since the enactment of new legislation in 1980, insurance has expanded from 1,676 counties to over 3,000 counties. County programs have increased over 300 percent, from 4,629 in 1980 to 19,250 in 1987. Thus, crop insurance was available in 49 states in 1987, and all agricultural counties on the acreage previously covered by disaster payments.

Insured acres, insurance-in-force and premium have also increased substantially since the new legislation. In 1980, insured acres were 26.6 million, compared with 50 million for 1987. Insurance liability in force has increased from $3 billion in 1980 to about $6.3 billion in 1987. Premium has increased from $158 million in 1980 to about $375 million in 1987.

Regarding our losses in the past year, we are optimistic that when the final numbers are in, our loss ratio will be around 1.0, which would be one of the better years we have had in quite a few years.

FISCAL YEAR 1988—UNIQUE YEAR

Fiscal year 1988 is proving to be a unique year for the Corporation. February 16 marked the half century anniversary since inception of the program in 1938, when crop insurance was first offered through a pilot program for wheat.

In addition to the Corporation celebrating its 50th year, 1988 also marks the year in which we went into our 50th state and offered insurance coverage on over 50 crops. Crop insurance today is offered on 19,400 county programs and is available in virtually every agricultural county in the United States. Figs, onions, stone fruit in California, canning and processing snap and lima beans are authorized for coverage in 1988 along with macadamia nuts and macadamia trees in Hawaii.

MANAGEMENT INITIATIVES

Since coming on board February 1, I have initiated a number of management actions which I feel will address some of the problem areas in FCIC and should help alleviate some of the Committee's concerns over program integrity. These initiatives include the following:

I have charged a top level group of career FCIC, departmental, and Office of Inspector General specialists to conduct a total review and retooling of our internal controls program with a view toward establishing an effective means to identify and correct program and administrative vulnerabilities.

I have increased the number of compliance offices with two new field offices opening in the third and fourth quarters of this year. These offices will expand our capability to evaluate contract compliance of both delivery systems, including additional functions, such as company underwriting practices, actual production history verification procedures, and other components.

In addition, I am currently seeking formal departmental approval to elevate our compliance operation to the assistant manager level and have it report directly to me.

We are continuing our efforts to provide timely and accurate processing of applications and losses on federal paper at the field level through our distributive processing system. We will continue to review these efforts as part of a comprehensive ADP plan designed to improve information access and ultimate service to the producer.

In recent weeks, FCIC has taken aggressive action to impose management controls and administrative checks on program areas. We have announced a moratorium on policy and program adjustments to permit the significant changes made in the last 2 years to stabilize. We are instituting a schedule and process for future crop policy improvements and will provide all constituencies with an opportunity for input and will assure timely implementation relative to our sales efforts.

FCIC is aware of the encouragement the committee has given to the Office of Inspector General of the Department to review the operations of our insurance program and assure the integrity of the claims process in our partnership with the private sector. We have been working cooperatively with OIG to ensure that they are able to adequately review our work and to make sound judgments about our business.

FCIC COMPLIANCE WORKING WITH OIG

In addition, our own compliance division has worked closely with OIG officials to bring to the attention of authorities cases of error, program abuse or potential fraud. As the committee may know, during 1987, our compliance division received a special commendation from OIG and from the Department of Justice for its cooperation and work in exposing a significant fraud operation. I can assure the committee of our continued spirit of cooperation in responding to errors which are discovered, uncovering instances of potential abuse, and aggressive enforcement actions.

I would like to have two exhibits inserted in the record. The first is a table of 1987 crop year experience, by commodity, showing our actuals as of mid-February 1988.

The second shows loss ratios during the 40 years of our existence.

PREPARED STATEMENT AND EXHIBITS

Senator BURDICK. The exhibits will be received.

Mr. MARSHALL. This concludes my statement. I will be happy to answer any questions of the committee at this time.

[The statement of John Marshall and exhibits follow:]

STATEMENT OF JOHN MARSHALL

It is a pleasure for me to appear here to present the 1989 Budget for the Federal Crop Insurance Corporation.

Our budget request for fiscal year 1989 is as follows:

--$217,970,000 for Administrative and Operating Expenses to fund the expanded crop insurance program. About $132.5 million of this amount will be required for reinsurance administrative expenses and $24.4 million for master marketing expenses and loss adjustment functions. Also included in the request is $2.5 million to be reimbursed to ASCS for services performed under the ASCS National Agreement. These amounts total $159.4 million, vary directly with the volume of business, and account for more than 73 percent of the Corporation's total request for administrative and operating expenses.

--$112,000,000 for premium subsidy for fiscal year 1989. This amount represents 30 percent of the expected premium, up to the 65 percent level of coverage, as authorized by the Federal Crop Insurance Act of 1980, as amended.

The $112 million would provide for maximum expansion of the crop insurance program to an estimated 61.2 million insured acres.

--$100,000,000 use of Commodity Credit Corporation funds is requested as a reserve against heavy unavoidable losses for crop years 1988 and 1989.

This represents a total budget request for fiscal year 1989 of $429,970,000 for on-going programs. The total for fiscal year 1989 is only $1,447,000 higher than the total 1988 appropriations for on-going programs.

Administrative and Operating Expenses

The Appropriation request for Administrative and Operating Expenses for fiscal year 1989 will allow the Corporation to continue expansion of the crop insurance program. Resources are requested to expand insurance coverage from the crop year 1987 level of 50 million insured acres to 57.8 million insured acres in crop year 1988, and 61.2 million acres in crop year 1989.

Two basic forms of delivery are currently in place; reinsured companies, which provide all of the fundamental insurance services and share underwriting gains and losses; and Agency Sales and Service Contractors, who sell and partially service crop insurance written on FCIC paper, but who are not at risk. For 1988 we have increased the responsibilities of both systems by improving procedural requirements and adding to the risk retention levels for Reinsured Companies, and by imposing electronic transfer responsibilities as well as establishing minimum premium level requirements to assure a sound business foundation for Master Marketers.

Of the amount requested for Administrative and Operating Expenses, about $157 million will be used for reinsurance administrative expense, loss adjustment costs, and contractor service fees. About $2.5 million will be used for reimbursement to ASCS. The remaining $58.6 million will be used for the expenses of the Federal Crop Insurance Corporation to maintain field underwriting offices, field operations offices, the Kansas City Operations office which includes corporate computer support, office automation, management information costs, and the Headquarters staff.

In total, our fiscal year 1989 request for Administrative and Operating Expenses represents an increase of $18 million over the fiscal year 1988 appropriations. About 80% of this amount is directly related to anticipated increase in program levels and compliance work.

Premium Subsidy

The fiscal year 1989 appropriation request of $112 million for premium subsidies represents a decrease of $116 million from the fiscal year 1988 premium subsidy appropriation. This decrease is because the Corporation instituted a major change in its accounting and budgeting systems for the FCIC revolving fund. As directed by GAO, the Corporation brought its financial statements into conformance with generally accepted accounting principles in the Financial Accounting Standards Board Memorandum No. 60, FASB 60, which would match revenues and expenses in its financial statements in the fiscal year in which they were earned or incurred. The Corporation historically had deferred all income and losses of the current crop year for inclusion in the following fiscal year. Fiscal year 1988 represented a "catch-up" year for premium subsidy appropriation required for crop year 1987 as well as 75 percent of subsidy required for crop year 1988; however, the request in fiscal year 1989 represents 100 percent of the subsidy required for crop year 1989.

Use of Commodity Credit Corporation Funds

FCIC has no plans to use the funds of the Commodity Credit Corporation in fiscal year 1988; we have reflected use of $100 million in fiscal year 1989 as a reserve against heavy unavoidable losses in crop years 1988 and 1989.

Crop Year 1987 Experience

Federal Crop Insurance is intended to become the primary form of Federal disaster protection for farmers, and eventually replace the current and emergency legislated farm disaster programs. Since the enactment of new legislation in 1980, insurance has expanded from 1,676 counties to over 3,000 counties. County programs have increased over 300 percent, from 4,629 in 1980 to 19,250 in 1987. Thus, crop insurance was available in 49 states in 1987 and all agricultural counties on the acreage previously covered by disaster payments.

Acres insured, insurance in force, and premium have also increased substantially. In 1980, acres insured were 26.6 million compared with 50 million for crop year 1987. Insurance liability in force has also increased for the same period, from $3 billion in 1980 to about $6.3 billion in 1987. Premium has increased from $158 million in 1980 to about $375 million in 1987.

Based on earlier reports, the President's budget submission for the crop year 1987 insurance operations reflects premiums for the reinsurance share at $315 million and indemnities of $410 million, with the remaining premiums of $60 million handled by master marketers with indemnities of $78 million. The loss ratio for both delivery systems were estimated at 1.30. However, current estimates show premium for reinsurance operations at $304.8 million with indemnities of $270.8 million, for a loss ratio of .89, and $60.6 million in premiums handled by Agency Sales and Service Contractors with indemnities of $64.4 million for a loss ratio of 1.06. The combined efforts of the public and private sector show total premium amounting to about $365.4 million, and total indemnities of about $335.2 million, for a combined loss ratio of .92, as of mid February 1988. We are optimistic that when the final numbers are in, the loss ratio will be less than 1.0.

Crop Year 1988 Projections

Fiscal year 1988 is proving to be a unique year for the Corporation. February 16 marked the half-century anniversary since the inception of the program in 1938 when crop insurance was first offered through a pilot program for wheat. In addition to the Corporation celebrating its' 50th year, 1988 also marks the year in which we went into our 50th state and also offered insurance coverage on over 50 crops. Crop insurance is offered on 19,400 county programs and is available in virtually every agricultural county in the continental United States. Figs, onions, stonefruit in California, canning and processing snap and lima beans are authorized for coverage in the 1988 crop year along with macadamia nuts and macadamia trees in Hawaii. Total insured acres are estimated at 57.8 million for the 1988 crop year and premium is expected to be about $425 million.

I would like to add some general comments to my statement at this time.

Since I came on board almost two months ago, I have initiated a number of management actions which I feel will address several problem areas in FCIC and should help alleviate some of the Committee's concerns over program integrity. These initiatives are:

-- I have charged a top level group of career FCIC, Departmental, and Office of Inspector General specialists to conduct a total review and retooling of our internal controls program toward establishing an effective means to identify and correct program and administrative vulnerabilities;

-- I have increased the number of Compliance offices; with two new offices opening in the third and fourth quarters of this year. These offices will expand our capability to evaluate contract compliance of both delivery systems, including additional functions, such as company underwriting practices, Actual Production History verification procedures, and other components. Additionally, I am currently seeking formal Departmental approval to elevate the Compliance operation to the Assistant Manager level and have it report directly to me.

-- We are continuing our efforts to provide timely and accurate processing of applications and losses on federal paper at the field level through our distributive processing program. We will continue to review these efforts as part of a comprehensive ADP plan designed to improve information access and service to producers.

-- In recent weeks the FCIC has taken aggressive action to impose management controls and administrative checks on program areas. We have announced an immediate moratorium on policy and program adjustments to permit the significant changes made in 1986 and 1987 to stabilize. We are instituting a schedule and process for future crop policy improvements which will provide all constituencies with an opportunity for input and will assure timely implementation relative to the sales effort.

-- The FCIC is aware of the encouragement the Committee has given to the Office of the Inspector General (OIG) of the Department to review the operations of the insurance program to assure the integrity of the claims processes and of our partnership with the private sector. We have been working cooperatively with the OIG to insure that they are able to adequately review our work and to make sound judgements about the business. In addition, of course, the Compliance Division works closely with OIG officials to bring to the attention of authorities cases of error, program abuse or potential fraud. As the Committee may know, during 1987 the FCIC Compliance Division received a commendation from the OIG and the Department of Justice for its cooperation and work in exposing a signficant fraud operation. I can assure the Committee of our continued spirit of cooperation in responding to errors which are discovered, uncovering instances of potential abuse, and aggressive enforcement action.

Exhibits

I would like to have two exhibits inserted in the record. The first exhibit is a table of the 1987 crop year experience, by commodity, showing actuals as of mid-February 1988.

The second exhibit shows loss ratios during the 40 years of our existence. The crop insurance program has had 18 years in which premiums have exceeded indemnities and 22 years in which the reverse has been true. The 40-year loss ratio is 1.34.

This concludes my statement. We will be glad to answer any questions or furnish any additional information you may desire.

ESTIMATED CROP INSURANCE EXPERIENCE - 1987
AS OF MID-FEBRUARY 1988
ALL PROGRAMS
(Dollars in Thousands)

EXHIBIT 1

	Amount of Premium (a)			Amount of Indemnities			Loss Ratio		
	Government Operations	Reinsurance Operations	Total	Government Operations	Reinsurance Operations	Total	Government Operations	Reinsurance Operations	Total
Wheat	13,301	42,925	56,226	13,979	43,060	57,039	1.05	1.00	1.01
Cotton	1,949	26,994	28,943	981	9,235	10,216	0.50	0.34	0.35
Combined Crop	0	0	0	0	0	0	0.00	0.00	0.00
Tobacco	4,134	10,777	14,911	4,901	15,315	20,216	1.19	1.42	1.36
Corn	10,097	69,730	79,827	5,804	38,286	44,090	0.57	0.55	0.55
Flax	82	288	370	86	247	333	1.06	0.86	0.90
Bean	965	6,068	7,033	2,321	9,909	12,230	2.40	1.63	1.74
Citrus	601	2,147	2,748	117	238	355	0.19	0.11	0.13
Soybean	10,491	65,422	75,913	12,806	73,537	86,343	1.22	1.12	1.14
Barley	2,029	7,526	9,555	1,980	8,973	10,953	0.98	1.19	1.15
Peach	691	966	1,657	1,329	2,102	3,431	1.92	2.18	2.07
Grain Sorghum	1,078	7,257	8,335	1,299	6,535	7,834	1.20	0.90	0.94
Oat	179	559	738	220	758	978	1.22	1.36	1.32
Rice	146	1,602	1,748	215	3,886	4,101	1.47	2.43	2.35
Raisin	490	9,216	9,706	0	0	0	0.00	0.00	0.00
Pea, Green & Dry	177	810	987	52	479	531	0.30	0.59	0.54
Peanut	4,700	16,358	21,058	11,712	33,893	45,605	2.49	2.07	2.17
Potato	631	5,169	5,800	2,716	9,922	12,638	4.31	1.92	2.18
Apple	1,344	3,551	4,895	929	3,247	4,176	0.69	0.91	0.85
Tomato	147	2,987	3,134	114	466	580	0.77	0.16	0.18
Sugar Beet	780	3,809	4,589	289	1,236	1,525	0.37	0.32	0.33
Grape	249	1,907	2,156	110	727	837	0.44	0.38	0.39
Sugarcane	19	271	290	0	102	102	0.00	0.38	0.35
Puerto Rico Reins.	0	0	0	0	0	0	0.00	0.00	0.00
Sunflower	461	2,315	2,776	187	1,300	1,487	0.41	0.56	0.54
Forage Seeding	1	3	4	0	2	2	0.00	0.67	0.52
Sweet Corn	62	368	430	56	123	179	0.90	0.33	0.42
Forage Production	1	1	2	0	0	0	0.00	0.00	0.00
Rye	3	11	14	2	8	10	0.83	0.73	0.75
Almond	755	4,157	4,912	133	247	380	0.18	0.06	0.08
Prev. Planting	0	1	1	0	0	0	0.00	0.00	0.00
Hybrid Seed	203	4,567	4,770	51	4,012	4,063	0.25	0.88	0.85
Citrus Tree	1	1,081	1,082	0	0	0	0.00	0.00	0.00
Table Grape	74	720	794	54	181	235	0.73	0.25	0.30
Pepper	501	449	950	76	105	181	0.15	0.23	0.19
Popcorn	40	376	416	11	202	213	0.28	0.54	0.51
Tomato, Fresh	3,892	2,473	6,365	1,802	1,297	3,099	0.46	0.52	0.49
Walnut	18	98	116	0	18	18	0.00	0.18	0.15
Cranberry	0	577	577	0	438	438	0.00	0.76	0.76
Nursery Stock	0	64	64	0	0	0	0.00	0.00	0.00
Cotton, ELS	21	27	48	0	60	60	0.00	2.22	1.26
Sweet Corn, Fresh	24	391	415	19	547	566	0.79	1.40	1.36
Canning Peach	9	231	240	0	4	4	0.00	0.02	0.02
Prune	208	507	715	0	70	70	0.00	0.14	0.10
Safflower	15	53	68	17	49	66	1.10	0.92	0.96
ALL PROGRAMS	60,569	304,809	365,378	64,370	270,816	335,186	1.06	0.89	0.92

FEDERAL CROP INSURANCE CORPORATION
REINSURANCE OPERATIONS

EXHIBIT II(A)

PROGRAM	1948-80	1981	1982	1983	1984	1985	1986	1987	1981-87
	LOSS RATIOS - 1981-1987 CROP YEAR								
Wheat	*	0.79	0.75	0.64	1.61	2.40	1.65	1.00	1.53
Cotton	*	1.36	2.38	1.78	1.71	0.60	2.68	0.34	1.44
Combined Crop	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tobacco	*	1.58	0.77	2.28	0.54	0.65	1.54	1.42	1.17
Corn	*	0.38	0.53	2.62	0.87	0.65	0.75	0.55	0.79
Flax	*	0.00	1.40	1.73	0.00	1.08	1.21	0.86	1.10
Bean	*	0.11	3.06	1.35	1.03	1.19	1.26	1.63	1.69
Citrus	*	0.00	0.34	0.00	3.43	4.59	0.70	0.11	1.48
Soybean	*	0.68	1.17	1.96	1.99	1.90	1.93	1.12	1.70
Barley	*	0.71	0.46	0.79	2.32	4.84	1.78	1.19	2.40
Peach	*	0.00	2.33	3.47	0.49	3.19	1.85	2.18	2.05
Grain Sorghum	*	0.97	0.95	1.73	2.41	1.68	1.71	0.90	1.69
Oat	*	1.94	0.60	0.69	0.98	1.40	1.70	1.36	1.25
Rice	*	0.00	1.71	3.47	1.47	3.10	2.83	2.43	2.55
Raisin	*	0.00	0.00	1.20	0.53	0.17	0.06	0.00	0.54
Pea	*	0.00	0.00	0.87	1.47	1.15	0.76	0.59	0.79
Peanut	*	0.00	0.87	3.46	0.83	0.95	2.69	2.07	1.86
Potato	*	0.00	1.10	2.60	2.05	3.52	3.39	1.92	2.54
Apple	*	0.00	2.23	0.00	4.41	2.56	2.50	0.91	1.76
Cherry	*	*	*	*	*	*	*	*	*
Tomato	*	0.00	0.00	1.50	1.10	0.64	0.47	0.16	0.67
Safflower	*	*	*	*	*	*	*	0.92	0.92
Sugar Beet	*	1.38	0.00	0.69	0.73	0.99	1.11	0.32	0.68
Tung Nut	*	*	*	*	*	*	*	*	*
Grape	*	0.00	0.00	2.67	0.98	0.78	0.66	0.38	1.36
Sugarcane	*	0.00	0.00	8.67	3.67	0.93	0.18	0.38	1.86
Puerto Rico Reins.	*	*	*	0.31	0.38	0.39	0.00	0.00	0.41
Sunflower	*	1.02	1.33	0.99	1.62	3.81	1.41	0.56	1.79
Forage Seeding	*	0.00	0.00	0.00	0.00	1.53	1.40	0.67	1.08
Sweet Corn	*	0.00	0.00	0.00	0.00	0.78	0.32	0.33	0.50
Forage Production	*	2.00	0.00	0.00	0.00	4.76	0.00	0.00	2.52
Rye	*	0.00	0.00	0.00	0.00	0.47	0.52	0.73	0.39
Almond	*	0.00	0.00	3.78	0.00	1.17	5.38	0.06	1.46
Prev. Planting	*		0.00	0.00	0.00	0.00	16.86	0.00	15.54
Hybrid Seed	*			12.13	3.30	0.71	0.60	0.88	0.91
Citrus Tree	*			0.00	24.39	0.82	0.08	0.00	2.82
Table Grape	*				3.18	1.58	0.33	0.25	1.30
Pepper	*				1.47	4.53	1.00	0.23	1.39
Popcorn	*				4.41	2.21	1.93	0.54	1.94
Fresh Tomato	*				4.41	6.57	0.63	0.52	1.47
Walnut	*				0.00	0.01	2.93	0.18	1.04
Cranberry	*				0.00	0.20	1.28	0.76	0.82
Nursery Stock	*				0.00	0.00	0.00	0.00	0.00
Cotton, ELS	*					0.00	0.00	2.22	0.49
Sweet Corn, Fresh	*					3.06	1.54	1.40	1.65
Canning Peach	*						0.94	0.02	0.02
Prune	*						7.98	0.14	3.26
ALL PROGRAMS	*	0.71	0.89	1.70	1.46	1.55	1.52	0.89	1.35

FEDERAL CROP INSURANCE CORPORATION
GOVERNMENT OPERATIONS

EXHIBIT II(B)

LOSS RATIOS - 1948-1987

PROGRAM	CROP YEAR									
	1948-80	1981	1982	1983	1984	1985	1986	1987	1981-87	1948-87
Wheat	1.05	0.97	0.92	1.02	1.56	2.91	1.51	1.05	1.29	1.14
Cotton	1.57	1.10	1.80	1.66	0.94	0.48	2.01	0.50	1.39	1.50
Combined Crop	1.18	0.17	0.32	0.62	0.10	0.60	1.16	0.00	0.38	1.12
Tobacco	1.04	0.89	1.05	3.23	0.49	0.56	1.87	1.19	1.32	1.15
Corn	1.08	0.59	0.52	2.83	0.94	0.65	0.91	0.57	0.86	0.98
Flax	0.89	0.90	1.19	0.80	0.79	1.19	1.35	1.06	1.02	0.90
Bean	0.92	1.01	2.96	1.18	1.44	1.89	1.08	2.40	1.83	1.42
Citrus	1.40	2.23	0.05	0.00	2.40	2.78	0.15	0.19	1.56	1.43
Soybean	0.89	1.82	2.12	2.59	1.80	1.56	1.87	1.22	2.01	1.72
Barley	0.95	0.82	0.68	0.89	1.91	3.93	1.79	0.98	1.54	1.27
Peach	1.25	0.35	4.16	2.75	1.22	2.28	3.15	1.92	2.25	1.59
Grain Sorghum	1.05	0.93	1.23	2.31	2.61	1.96	2.04	1.20	1.56	1.34
Oat	0.84	1.39	0.61	0.80	1.08	1.72	1.53	1.22	1.15	0.96
Rice	1.47	1.86	3.38	4.09	1.47	2.04	1.49	1.47	2.78	2.39
Raisin	1.01	0.00	6.28	0.91	0.14	0.04	0.00	0.00	2.42	1.84
Pea	1.27	0.68	0.73	0.94	1.12	0.59	0.40	0.30	0.73	1.13
Peanut	1.35	0.62	0.79	2.93	0.86	1.09	2.53	2.49	1.45	1.42
Potato	2.06	1.36	2.07	2.83	3.40	1.80	1.56	4.31	2.66	2.53
Apple	1.27	1.54	1.55	1.76	1.05	3.12	2.17	0.69	1.68	1.46
Cherry	2.61	*	*	*	*	*	*	*	*	2.61
Tomato	0.75	0.40	2.62	1.11	2.17	1.50	0.94	0.77	1.65	1.40
Safflower	2.50	*	*	*	*	*	*	1.10	1.40	1.63
Sugar Beet	0.77	0.59	0.52	0.75	0.68	0.97	0.53	0.37	0.62	0.71
Tung Nut	0.74	*	*	*	*	*	*	*	*	0.74
Grape	0.99	0.85	2.28	2.46	0.58	1.02	0.90	0.44	1.75	1.52
Sugarcane	0.86	1.22	0.80	4.36	0.26	0.11	0.00	0.00	1.97	1.43
Puerto Rico	0.15	*	*	0.00	0.00	0.00	0.00	0.00	0.00	0.15
Sunflower	1.03	0.70	1.43	1.11	1.55	4.31	1.83	0.41	1.38	1.27
Forage Seeding	4.88	4.38	2.67	1.20	2.00	1.45	0.69	0.00	2.79	3.43
Sweet Corn	0.59	1.12	0.43	1.18	0.42	1.38	0.61	0.90	0.84	0.80
Forage Production	2.00	3.15	2.12	2.71	0.00	0.37	0.00	0.00	2.15	2.10
Rye	1.00	0.00	0.23	0.59	0.30	1.51	0.94	0.83	0.53	0.54
Almond		0.02	0.75	3.11	[illegible]	.44	5.17	0.18	1.19	1.19
Prev. Planting			5.62	1.31	0.40	1.97	8.67	0.00	5.63	5.63
Hybrid Seed				12.93	2.38	3.41	1.43	0.25	2.02	2.02
Citrus Tree				0.00	22.31	0.00	0.00	0.00	9.49	9.49
Table Grape					1.21	0.34	0.55	0.73	0.95	0.95
Pepper					1.17	2.81	2.15	0.15	1.36	1.36
Popcorn					3.03	2.02	0.90	0.28	2.06	2.06
Fresh Tomato					7.07	5.76	1.64	0.46	2.21	2.21
Walnut					0.04	0.49	1.42	0.00	0.36	0.36
Cranberry					0.00	0.00	0.00	0.00	0.00	0.00
Nursery Stock					0.00	0.00	0.00	0.00	0.00	0.00
Cotton, ELS						0.00	0.00	0.00	0.00	0.00
Sweet Corn, Fresh						0.20	0.00	0.79	0.56	0.56
Canning Peach							0.47	0.00	0.00	0.00
Prune							3.54	0.00	1.51	1.51
ALL PROGRAMS	1.10	1.09	1.43	2.20	1.46	1.78	1.56	1.06	1.48	1.28

* No Program.

(1) The crop year 1987 ratios for as of February 1988.

FEDERAL CROP INSURANCE CORPORATION
COMBINED OPERATIONS

EXHIBIT II(C)

PROGRAM	LOSS RATIOS - 1948-1987 CROP YEAR									
	1948-80	1981	1982	1983	1984	1985	1986	1987	1981-87	1948-87
Wheat	1.05	0.97	0.88	0.87	1.59	2.57	1.24	1.01	1.39	1.23
Cotton	1.57	1.11	1.88	1.70	1.58	0.58	1.61	0.35	1.42	1.48
Combined Crop	1.18	0.17	0.32	0.62	0.10	0.59	1.12	0.00	0.38	1.12
Tobacco	1.04	0.89	0.99	2.96	0.51	0.61	1.14	1.36	1.26	1.15
Corn	1.08	0.58	0.52	2.74	0.89	0.65	0.94	0.55	0.82	0.90
Flax	0.89	0.89	1.25	1.08	0.34	1.19	0.91	0.90	1.05	0.91
Bean	0.92	1.01	2.99	1.28	1.14	2.23	1.48	1.74	1.73	1.53
Citrus	1.40	2.23	0.08	0.00	2.61	3.41	1.50	0.13	1.53	1.44
Soybean	0.89	1.80	2.01	2.47	1.90	1.80	1.78	1.14	1.87	1.71
Barley	0.95	0.82	0.63	0.85	2.14	4.55	1.77	1.15	2.00	1.71
Peach	1.25	0.35	3.60	3.08	0.81	2.79	1.70	2.07	2.10	1.71
Grain Sorghum	1.05	0.93	1.15	2.00	2.47	1.75	1.55	0.94	1.63	1.50
Oat	0.84	1.42	0.60	0.76	1.03	1.53	0.99	1.32	1.18	1.00
Rice	1.47	1.86	3.36	4.05	1.47	2.81	2.44	2.35	2.70	2.43
Raisin	1.01	0.00	6.28	1.14	0.48	0.16	1.17	0.00	1.02	1.02
Pea	1.27	0.68	0.65	0.92	1.28	0.96	1.10	0.54	0.76	1.06
Peanut	1.35	0.62	0.80	3.06	0.85	1.00	1.46	2.17	1.63	1.57
Potato	2.06	1.36	1.40	2.75	2.72	2.18	2.66	2.18	2.53	2.50
Apple	1.27	1.54	1.64	1.45	1.99	2.82	1.79	0.85	1.71	1.56
Cherry	2.61	*	*	*	*	*	*	*	*	2.61
Tomato	0.75	0.40	2.56	1.44	1.14	0.68	0.92	0.18	0.78	0.78
Safflower	2.50	*	*	*	*	*	*	0.96	0.96	1.05
Sugar Beet	0.77	0.68	0.35	0.73	0.71	0.98	0.77	0.33	0.65	0.70
Tung Nut	0.74	*	*	*	*	*	*	*	*	0.74
Grape	0.99	0.85	2.28	2.61	0.93	0.81	1.55	0.39	1.49	1.43
Sugarcane	0.86	1.22	0.80	5.05	2.58	0.84	1.59	0.35	1.92	1.55
Puerto Rico Reins.	0.15	*	*	0.31	0.38	0.00	0.39	0.00	0.41	0.39
Sunflower	1.03	0.72	1.40	1.06	1.59	3.96	1.53	0.54	1.56	1.47
Forage Seeding	4.88	4.38	2.40	1.20	2.00	1.67	3.15	0.52	2.36	2.99
Sweet Corn	0.59	1.12	0.39	1.18	0.42	0.90	0.68	0.42	0.61	0.61
Forage Production	2.00	3.07	2.12	2.71	0.00	3.17	2.20	0.00	2.23	2.16
Rye	1.00	0.00	0.16	0.59	0.30	0.94	0.44	0.75	0.47	0.47
Almond		0.02	0.75	3.50	0.00	1.09	1.35	0.08	1.38	1.38
Prev. Planting			5.62	1.31	0.40	0.00	6.45	0.00	6.38	6.38
Hybrid Seed				12.07	3.05	0.72	1.07	0.85	1.02	1.02
Citrus Tree				0.00	23.58	0.81	7.26	0.00	5.16	5.16
Table Grape					3.00	1.56	2.02	0.30	1.74	1.74
Pepper					1.33	3.85	1.91	0.19	1.37	1.37
Popcorn					3.98	2.18	2.53	0.51	1.96	1.96
Fresh Tomato					6.31	6.00	3.28	0.49	1.91	1.91
Walnut					0.04	0.07	1.20	0.15	0.94	0.94
Cranberry					0.00	0.20	0.87	0.76	0.82	0.82
Nursery Stock					0.00	0.00	0.00	0.00	0.00	0.00
Cotton, ELS						0.00	0.10	1.26	0.34	0.34
Sweet Corn, Fresh						2.87	1.78	1.36	1.60	1.60
Canning Peach							0.87	0.02	0.02	0.02
Prune							6.59	0.10	2.73	2.73
ALL PROGRAMS	1.10	1.08	1.32	2.02	1.46	1.61	1.34	0.92	1.42	1.30

* No Program.

[CLERK'S NOTE: The following letter was provided as supplemental information:]

LETTER FROM JOHN MARSHALL

APR 18 1988

COPY

Honorable Jamie L. Whitten
Chairman
Committee on Appropriations
Washington, D.C. 20515

Dear Mr. Chairman:

Thank you for the courtesies you extended during my recent appearance before the Subcommittee on Rural Development, Agriculture, and Related Agencies of the Appropriations Committee. As one who has only recently assumed the duties of my post, I was especially gratified by your understanding and your willingness to consider my written comments regarding the status of our efforts to respond to your concerns and the deficiencies that have been identified in the recent GAO and Committee audits.

I have addressed the written questions from my hearing separately, and to the best of my ability. I would like to take this opportunity to discuss what I consider to be major issues and improvement opportunities facing the crop insurance program and management of the Corporation, based upon my experience to date. These include some observations on the audit findings of the GAO and the Surveys and Investigations Staff reports, your concerns in the areas of market penetration, program integrity and cost-effectiveness, and my plans for addressing these and other needs.

Market Penetration

I share your concern about the leveling off of market penetration in recent years. While we are pleased to have sustained the current level of activity in light of other USDA programs designed to withdraw land from production (some 335 million acres set aside from 1982 through 1988), I recognize the need for expanding service to more producers.

As you know, the original legislative intent was to utilize the private sector to the maximum extent possible to take advantage of existing marketing systems. We concur wholeheartedly with the need to energize those systems. To that end, I have emphasized my disappointment at the level of sales during recent discussions with representatives of both of our delivery systems, the reinsured companies and the master marketers. I am, obviously, committed to retention of both systems as the best opportunity to increase sales and meet our Congressional mandate to make the crop insurance program available to all producers. To further this goal, on May 12, 1988, I have called a "Summit Meeting" of company and industry representatives from the various trade associations representing the delivery systems and their agents, to identify obstacles and explore ways to increase our sales and to reduce tensions between the delivery systems. Among the subjects to be discussed are the possible use of sales goals and other incentives.

I am convinced that two interrelated factors cause much of our problem in marketing: the extreme complexity of the product compared to other types of insurance; and the constant changes in the program, which necessitate extensive reeducation of agents and producers every year. The latter is also a major factor in escalating program administrative costs. One of my first actions as Manager was to extend a moratorium on program changes, which, among other benefits, should mitigate the reeducation problem through 1989. In the longer run, ways must be found to simplify our product to make it easier to understand.

There is more that can be done through outreach and outside resources to spread the word about the benefits of crop insurance. I am encouraged by Delaware's recent action to subsidize premium as a further inducement to producers purchasing crop insurance. The nation's banks are becoming increasingly aware of crop insurance as a form of security behind farm loans.

Avenues such as these should be explored further with other states and the lending community.

I am meeting this week with our Extension Service/FCIC Advisory Committee to hear concerns about our actual production history program. This is another vehicle that can, and should, be energized to help sort out the issues affecting producers' satisfaction and participation in the program. I am hopeful that the "Summit Meeting" will shed additional light on these issues.

Management Control Over Reinsured Companies

There has been strong and well grounded concern raised about the effectiveness of our management control over the reinsured companies.

The FCIC began, in late 1985, a process of redesigning and enhancing our oversight and compliance activities. Our Compliance Division was established in 1986 to exercise direct oversight of the companies' field activities and overall fidelity to the reinsurance agreements. In addition, a major restructuring of the FCIC's management was initiated to consolidate policy development and program oversight in the Washington, D.C. office. We have not staffed up as quickly as we had hoped. Indeed, we originally underestimated our staffing needs. With the 1988 staff allocations, we have increased the Division's staff from 40 to 60 fulltime equivalents, and are now opening new field offices in Dallas, Texas, and Sacramento, California. These actions were taken to assure an adequate audit staff, locate them in greater proximity to field work demands, and to increase the possibility of fully staffing the Division promptly by providing placement opportunities outside of the Washington, D.C. area.

As a result of earlier reviews of the Reinsurance Agreement, the FCIC began, during 1987, to substantially increase the procedural requirements placed on the companies for adherence to training, written procedures, and internal control standards. During 1987, the Compliance Division completed general reviews of each company's operations, in addition to standard audits of loss adjustment and compliance to APH procedure. Numerous procedural errors were discovered, and actions were taken to require greater attention to FCIC approved procedure and to recover erroneously made payments. We are currently in the process of recovering overpayments confirmed as having been made in error. We will continue to improve our audit procedures and to aggressively pursue recovery of excess payments whenever they are identified. Moreover, we intend to monitor the activities of individual companies for patterns of laxity or abuse, and to impose aggressive sanctions, such as suspensions, or assumption of insurance operations, including loss adjustment, whenever necessary.

In addition, we have increased the levels of risk required to be retained by the companies, thus increasing their exposure and the need for greater self discipline and prudent loss adjustment.

Concern has been raised that the FCIC has not actually terminated an agreement or debarred a company for violations of procedural requirements. The FCIC considers that the use of the private sector is principally to achieve market penetration, and therefore desires to affiliate with as many sales and service contractors and reinsured companies as possible for the benefit of producers. However, we will never permit a "business as usual" approach when we are aware of incapacitating deficiencies in either system.

In the case of the principal company identified as deficient in the GAO investigation, the company was notified of its prospective suspension before the presentation of the Report. It is true that, for six months, the company continued to do business. However, it did so at its own risk, with the understanding that, if FCIC's requirements were not fully met, its business would not be reinsured by FCIC. Prior to the final resolution of this matter, the FCIC required a complete reordering of company internal controls and procedures, the adoption of new, current, and approved loss adjustment manuals, and attention to other sales and service deficiencies. In addition, the company was billed for, and required to pay, the indemnities paid in error and sustained as erroneous under the appeal process. Finally, FCIC suspended certain loss adjustment responsibilities for a brief period in January 1988. The company responded affirmatively to these sanctions, and the FCIC was able to reaffirm an agreement subject to continuing aggressive oversight by the Compliance Division.

FCIC's forbearance, coupled with aggressive oversight and appropriate, graduated sanctions, permitted the government to retain and enhance the services of a company doing some $20 million in business in the South, including the States of Mississippi, Louisiana, Arkansas, and Oklahoma. We believe that such a "carrot and stick" approach is effective both in demonstrating to our delivery partners the seriousness of our commitment to achieving program compliance and integrity, and also in protecting the producer from unnecessary and confusing disruption of his business arrangements. While we hope similar situations do not recur, we reserve the right to weigh all factors before we precipitously terminate an agreement.

Competitive Bidding for Sales and Servicing

While we are often supportive of competitive contracting as a way of lowering costs and improving efficiency in services or operations, we have major concerns about competitive bidding for reinsurance contracts. One of the overriding objectives of our legislation was to allow the fullest possible participation of the private sector in delivering insurance services to producers. A competitive process would, in effect, establish exclusive market areas for the successful bidders, thereby limiting, rather than expanding, the number of agents who might serve a particular area. This was considered but rejected as clearly counter to the intent of Congress, as evidenced in the conference report accompanying our legislation. While such an approach might provide an incentive to an individual company to deliver the product at lower cost, we are concerned that marketing and service would suffer, particularly in high loss years. We are willing to explore such approaches more extensively, along with other avenues of encouraging marketing and service improvements, but at present we believe a more productive course is to improve operations under existing vehicles.

Application of Federal Acquisition Regulations (FAR)

It has also been suggested that the reinsurance agreement might fall under the purview of the Federal Acquisition Regulations (FAR) and thus be susceptible to other improvements in costing. In our response to the written questions from the hearing is included an opinion of USDA's Office of the General Counsel which indicates that the Standard Reinsurance Agreement (SRA) is not subject to the FAR.

Field Reorganization and Systems Support

During the past year, we have also engaged in an effort to restructure our field service operations to more clearly focus them on loss adjustment and claims management functions. In order to assure that the downsizing of staff which this effort anticipated in view of the decline in Federal business had the least possible adverse effect on current fulltime personnel, action to fill vacancies in other Divisions of the FCIC, including Compliance, was limited. Now that this process, as we informed you in January, is underway, and FCIC staff have had an opportunity to consider such vacancies, we have expanded our recruitment campaign nationwide.

Our distributed processing system is also under development and will provide our field service offices with automated claims processing capabilities for the first time ever, commencing in the present crop year. Our objective is to improve efficiency and cost-effectiveness of claims processing on Federal paper and, more importantly, to improve service to the farmer to the extent that any and all differences between reinsured company and Federal service are transparent to the farmer.

Program Administrative Costs

I share your concerns about the high and growing costs of administering the program. The total administrative cost has increased from about $92 million in 1981, to about $170 million in 1987, an 85% increase that has not been accompanied by a similar expansion in participation. Since 1981, cumulative program costs have summed to about $2.8 billion, with $1.7 billion, or 61%, paid to producers, and $1.1 billion, or 39%, absorbed by administration. The administrative cost is attributable to the three overhead components that Congress intended to be part of our delivery system, in the following shares: 40% to FCIC; 40% to reinsured companies; and 20% to the master marketers.

Since reinsured company and master marketer reimbursements have been determined on a fixed percentage basis, and rise directly with participation levels, the only cost component that is directly manageable is FCIC's overhead. With our field reorganization and automation, we are beginning to bring FCIC's costs more in line with program needs.

You have properly questioned the appropriateness of company and master marketer reimbursement rates. It is high time that a comprehensive and objective review be conducted. I intend to contract with a highly qualified and reputable accounting and auditing firm to determine the appropriateness of the reimbursement rates for both systems, fairly and equitably, once and for all.

Impact of Change on Overall Management

There is often a tendency in government for programs to change or expand rapidly, in response to new legislation or constituent servicing pressures, and for management infrastructures to lag behind, due to such factors as staffing or skill shortages, the protracted procurement and development cycle in computer systems design, and the lower priority paid to management issues, generally. FCIC appears to be a case in point. With the 1980 legislation, a revolutionary change in the delivery system was mandated to take place almost overnight. FCIC's priority, understandably, became developing a new and expanded private delivery system in order to meet the mandate of immediate, uninterrupted service delivery to producers.

The Corporation has achieved laudable successes in this regard, as evidenced by a dramatic increase in participation in the first year that has been sustained despite declining numbers of farmers and acreage in production. With the expansion of crops from about 30 to over 50 today, and from 1,676 counties in 1980 to over 3,000 today, the move to actual production history for improved actuarial soundness, and other innovations, the cumulative impact of constant changes has been, among other things, an unstable product that is extremely complicated, hard to sell, and requires major reeducation of the sales force and producers every year.

These factors have contributed to the pressures for increasing administrative reimbursements to the reinsured companies and master marketers to support the need for more intensive sales, servicing, and training efforts and to a considerable degree of frustration among FCIC personnel and our partners in the delivery system. The time has come for FCIC to stabilize, consolidate its gains, and build a solid managerial foundation for the future. The basic management infrastructures (financial and administrative systems, controls, and procedures, etc.) must be allowed to mature, catch up to, and, thereby, manage the program in its new formation. To this end, I have initiated a number of actions that will create a more stable environment and allow this to happen:

- I have endorsed, and extended, the moratorium on program changes imposed by the Acting Manager prior to my arrival, through the 1989 crop year. Only by ending the constant tinkering in program provisions can we redirect our resources towards building a solid foundation for a more stable future.

- I have charged a high level task force of career professionals, headed by the Assistant Manager for Administration, and assisted by specialists from the Department and the Office of Inspector General, to completely overhaul the Corporation's internal controls program, and apply the tools of the Federal Managers Financial Integrity Act for the first time to vulnerabilities in the Corporation's internal management and our management of the reinsured companies and master marketers.

- I have increased the number of Compliance field offices and staffing levels, and have requested Departmental authority to elevate the reporting relationship of the Compliance Division to the Assistant Manager level and have it report directly to me. Moreover, I am committed to filling vacancies immediately. If our expanded, governmentwide recruitment efforts do not pay off soon, I am prepared to consider aggressive alternatives, such as reassignments from lower activity or priority areas to put resources to work in this critical area without further delay.

- I have initiated a comprehensive internal planning process designed to gather input from managers throughout the Corporation concerning improvement opportunities, resource needs, and management priorities. I am personally reviewing all of the ideas received, and am in the process of formulating, along with key staff, a Corporate management plan. This plan will catalog, as completely as possible, all of our identified problems and initiatives in process or planned, along with priorities, resource commitments, and time frames to address them. It will encompass initiatives already underway to address GAO, OIG, Compliance and other audited deficiencies, findings and recommendations from the upcoming "Summit Meeting", and will represent a Corporate statement of goals and objectives and a master plan for their attainment. These initiatives will be linked to individual managers' performance agreements and tracked closely by my office. This will ensure improved communication of the Corporate mission throughout the workforce, commitment thereto, and clear accountability for results.

- I am reviewing other parts of the organization and program operations for opportunities for fine-tuning, simplification, and introduction of improved work processes and systems to improve efficiency, effectiveness, and service delivery.

I am confident that these initiatives will pay off in improved delivery of crop insurance to the producer at a lower cost to the taxpayer. But I must add the caveat that they will take time to implement and to show results.

I will be pleased to keep you and your staff advised on our progress, and welcome your comments on this letter or any other topic at your convenience.

Sincerely,

John Marshall

JOHN MARSHALL
Manager

FARM CREDIT SYSTEM ASSISTANCE BOARD

STATEMENT OF ERIC THOR, PRESIDENT AND CHIEF EXECUTIVE OFFICER

Senator BURDICK. We will now hear from Mr. Eric Thor.

Mr. THOR. Thank you very much, Mr. Chairman and distinguished Senators. Thank you for inviting me to testify today before the budget appropriations related to the Farm Credit System Assistance Board.

As you know, Mr. Chairman, the Agricultural Credit Act of 1987 created the mechanism by which the Farm Credit System institutions in severe—and I underline severe—financial trouble may receive financial assistance. Under the act, most of the cost of the assistance is off budget and will be repaid, ultimately, by the institutions assisted, an insurance fund, and the Farm Credit System on a combined basis as specified in the act.

FARM CREDIT SYSTEM ASSISTANCE BOARD

As part of this mechanism, the act created the Farm Credit System Assistance Board, which has the responsibility of working with capital-impaired system institutions to determine how best to ensure continued availability of agricultural credit at reasonable rates to farmers, ranchers, and their cooperatives.

Under the act, the Assistance Board can certify a Farm Credit System institution whose stock has a book value below par as eligible to receive financial assistance. The Assistance Board authorizes the institution to issue preferred stock, which may be purchased by the Farm Credit System Financial Assistance Corporation, also created by the act.

If assistance is determined not appropriate, the Assistance Board may request the Farm Credit Administration to appoint a receiver or to take other actions as specified in the act.

Any system institution may apply to the Assistance Board for certification to issue preferred stock if the book value of its equities has dropped below par or face value. If the book value of these equities drops below 75 percent of par value or face value, the institution has no choice: It must apply to the Assistance Board for financial assistance.

FINANCIAL ASSISTANCE CORPORATION

Through September 30, 1992, the Financial Assistance Corporation will raise funds to pay for the purchase of preferred stock using the proceeds of the issuance of 15-year debt obligations. Congress has authorized the issuance of up to $4 billion, $2.8 billion until January 1, 1989, and an additional $1.2 billion thereafter, if certain statutory criteria are met, including a report to Congress.

Interest on these debt obligations for the first 5 years will be paid by the Financial Assistance Corporation and guaranteed by the U.S. Treasury. During the second 5-year period, the interest costs will be split nominally between the Financial Assistance Corporation and the system institutions.

During the final 5 years of the 15-year period, the system institution will assume the entire payment of interest. At the end of the 15-year period, the act requires the system institutions receiving the financial assistance to repay the obligations to the extent they are financially able to do so.

The Farm Credit Administration, in consultation with the Secretary of the Treasury, will determine whether an institution is financially able to repay its obligations at the end of the period. It is important to note that a very delicate balance must be struck by the U.S. Government and the system institutions. Too much assistance will create a huge debt load which the institutions either individually or combined cannot afford to repay.

BUDGETED INTEREST COST—FISCAL YEAR 1989

The administration's budget for fiscal 1989 calls for $175 million to pay the cost of interest on the debt obligations issued by the Financial Assistance Corporation to meet the requirements of section 6.28 of the act. Let me point out a couple of important factors.

The amount of debt obligations issued and, therefore, the interest due, should be driven by the amount of assistance needed by the system and should not be constrained by the amount of money appropriated.

Two, the act requires that beginning in fiscal year 1989, the Secretary of the Treasury will reimburse the Financial Assistance Corporation for any amounts the Corporation pays in interest charges on the debt obligations.

Three, the Office of Management and Budget and the Congressional Budget Office have looked at these issues and used similar statistical models to determine the amount of interest that may be due. The OMB model estimated the financial condition in each of the 12 Federal Credit Districts, determined the amount necessary to maintain the required loan losses and calculated the additional capital necessary, if any, to maintain stock at 75 percent of par value.

These additional amounts, when totaled systemwide and the sum representing the face value of debt obligations to be issued by the financial assistance corporation, suggest that about $1.5 billion in debt would be issued in fiscal year 1988 and just under $500 million in fiscal year 1989.

Because the debt obligations are guaranteed by the U.S. Government. The interest will be paid in full for the first 5 years and in part for the next 5 years by the government, the OMB model assumes the debt will trade at 10 to 50 basis points over an imputed 15-year Treasury rate using the administration's interest rate forecast.

The act states that debt obligations will have a 15-year maturity, with interest payable semiannually and the first payment due 6 months after the first issuance.

Total interest payable for fiscal 1988 was estimated to be $44 million. This amount, by law, is to be reimbursed beginning in fiscal 1989 by the Department of the Treasury. In fiscal 1989, the interest rate on the debt obligations issued by the Financial Assistance Corporation ranges from 7.7 percent in the first quarter to 7.3 percent in the last quarter.

Total interest payable in 1989 from obligations issued in 1988 and 1989 is estimated to be $132 million. The total to be reimbursed through appropriations in 1989 is thus estimated at $175 million.

While the Congressional Budget Office figure was somewhat greater, and I believe CBO called for $210 million, the difference between the two figures is based principally on different forecasts of interest rates.

The Assistance Board cannot, at this time, predict the accuracy of the amount of the debt obligations that may be issued for financial assistance in fiscal 1989 with any degree of certainty. I believe the $175 million request now in the budget reflects the best possible estimate of interest costs on the future Financial Assistance Corporation debt obligations based upon projected economic data and on the current financial condition of the Farm Credit System.

It is important to note that this prediction is an estimate, and it may change due to a number of factors, such as changes in interest rates and the financial condition of System institutions.

ASSISTANCE BOARD ACTIVITIES

The Board, to date, has received requests for financial assistance from four Federal Land Banks and one production credit association. The severity of their financial problems vary; some require immediate attention and others are less urgent. Nevertheless, all are important, but in no case could I tell you today exactly how much or what kind of assistance will be required.

We are in the process of visiting with each institution that has applied for assistance before the Board. Our staff is carefully examining all aspects of institutional financial and operational conditions, making requests for additional financial information. Our eventual action in each case will be tailored to the particular situation.

The Assistance Board, chartered on January 21 of this year, is not yet 3 months old. I am proud of its progress. I believe we have been carrying out the intent of Congress, meeting expectations. The act required that within 15 days of charter, the Board retire the Capital Corporation stock. We met the deadline, returning more than $113 million to the system institutions that are stockholders of the former Capital Corporation.

RETIREMENT OF FROZEN STOCK

Last month, we completed agreements that permit the retirement of equities or frozen stock at par value, more than $20.5 million. These were equities held by farmer borrowers in the production credit associations in the Omaha and Spokane Districts in four states. These borrowers had been unable to retire their stock since the PCA's went into liquidation, in some cases, more than 2 years ago. This stock retirement comes at a very opportune time, as spring planting season is upon us.

You will see attached to my testimony a list of the production credit associations in liquidation in each of the districts and the amounts of the unretired stock and equities held by each association.

LITIGATION

The Assistance Board inherited from the former Farm Credit System Capital Corporation 44 lawsuits filed by Farm Credit System banks and associations against the former Capital Corporation and the Farm Credit Administration. Nineteen of these suits challenge the assessment process established under the Farm Credit Amendments Act of 1985. Eight have now been dismissed, either through court orders or stipulated dismissals. Of the remaining 11 lawsuits, only 5 involve plaintiffs that paid assessments. The Assistance Board is actively pursuing, through the Department of Justice, various options in an effort to bring about a dismissal of these and other lawsuits in which the Capital Corporation was involved.

Thirty-two suits remain outstanding currently. The passage of the Agricultural Credit Act of 1987, combined with our efforts to implement the act as quickly and as efficiently as possible, has resulted in increased investor confidence, reflecting in the narrowing spreads between System bonds and Treasury obligations of comparable maturity. The attached graphs illustrate how the spread has narrowed from a peak of 150 basis points last October.

Today, that spread is about 44 basic points. That could save several hundred million dollars over the next couple of years for the Farm Credit System and the Farm Credit System Institutions.

As you know, Mr. Chairman, the act authorized this funding for the operation of the Assistance Board through the Farm Credit Assistance Fund established from the proceeds of debt obligations issued by the Farm Credit Assistance Corporation. The Assistance Board budget, therefore, does not draw on U.S. tax dollars for operating expenses.

Nevertheless, since our budget constitutes an additional expense for the system overall, we are keenly aware of our responsibility to control our costs.

I want to emphasize, Mr. Chairman, that while we have a relatively small staff, we are moving as rapidly as possible to get the job done. It is impossible for me today to identify a specific dollar amount needed for interest on the debt obligations for the financial assistance. However, I can absolutely assure you that the Assistance Board, after determining that an institution should be certified to receive financial assistance, will do its best to authorize only the issuance of such debt obligations as necessary in accordance with the law and congressional intent, no more, no less, to provide the proper amount of assistance in each state.

Thank you, Mr. Chairman. I will be happy to respond to any questions.

Senator BURDICK. Thank you.

[The statement of Eric P. Thor follows:]

STATEMENT OF ERIC P. THOR

Good afternoon, Mr. Chairman. Thank you for inviting me to testify before you today on budget appropriations related to the Farm Credit System Assistance Board.

As you know, Mr. Chairman, the Agricultural Credit Act of 1987 created the mechanism by which Farm Credit System institutions in severe financial trouble may receive financial assistance. Under the Act, most of the cost of this assistance is off budget, and will be repaid ultimately by the institutions assisted, an insurance fund, and the Farm Credit System on a combined basis.

As part of that mechanism, the Act created the Farm Credit System Assistance Board, which has the responsibility of working with capital impaired System institutions to determine how best to insure continued availability of agricultural credit at reasonable rates to farmers, ranchers, and their cooperatives.

Under the Act, the Assistance Board can certify a Farm Credit System institution whose stock has a book value below par as eligible to receive financial assistance. The Assistance Board authorizes the institution to issue preferred stock which will be purchased by the Farm Credit System Financial Assistance Corporation, also created by the Act. If assistance is determined not appropriate, the Assistance Board may request the Farm Credit Administration to appoint a receiver.

Any System institution may apply to the Assistance Board for certification to issue preferred stock if the book value of its equities has dropped below par, or face value. If the book value of these equities drops below 75 percent of par value or face value, the institution has no choice - it must apply to the Assistance Board for financial assistance.

Through September 30, 1992, the Financial Assistance Corporation will raise funds to pay for the purchase of the preferred stock, using proceeds of the issuance of 15-year debt obligations. Congress has authorized the issuance of $4 billion ($2.8 billion until January 1, 1989 and an additional $1.2 billion thereafter, if certain statutory criteria are met including a report to Congress).

Interest on these debt obligations for the first five years will be paid by the Financial Assistance Corporation and guaranteed by the U.S. Treasury. During the second 5-year period the interest cost will be split nominally between the Financial Assistance Corporation and the System institutions. During the final five years, the System institutions will assume the entire payment of interest. At the end of the 15-year period, the Act requires that the System institutions receiving financial assistance repay the obligations to the extent they are financially able to do so.

The Farm Credit Administration, in consultation with the Secretary of the Treasury, will determine whether an institution is financially able to repay its obligations. It is important to note that a very delicate balance must be struck by the U.S. Government and the System institutions. Too much assistance may create a huge debt load which the institutions, either individually or combined, cannot afford to repay.

The Administration's budget for fiscal year 1989 calls for $175 million to pay the cost of interest on the debt obligations issued by the Financial Assistance Corporation, to meet the requirements of Section 6.28 of the Act. Let me point out that:

(1) The amount of debt obligations issued, and therefore the interest due should be driven by the amount of assistance needed

by the System, and should not be constrained by the amount of money appropriated.

(2) The Act requires that, beginning in fiscal year 1989, the Secretary of the Treasury reimburse the Financial Assistance Corporation for any amounts the Corporation pays in interest charges on the debt obligations.

(3) The Office of Management and Budget and the Congressional Budget Office used similar statistical models to determine the projected amount of interest that may be due. The OMB model estimated the financial condition of each of the twelve Farm Credit districts, determined the amounts necessary to maintain the required loan loss reserves and calculated the additional capital necessary, if any, to maintain stock at 75 percent of par value. These additional amounts were then totalled System-wide, and the sum represents the face value of debt obligations to be issued by the Financial Assistance Corporation. The Administration estimated that $1.5 billion in debt would be issued in fiscal year 1988, and just under $500 million in fiscal year 1989.

Because the debt obligations are guaranteed by the U.S. Government, and interest will be paid in full for the first five years and in part for the next five years by the government, the OMB model assumes the debt will trade at 10 to 50 basis points over an imputed 15-year Treasury rate, using the Administration's interest rate forecast. The Act states the debt obligations will have a 15-year maturity, with interest payable semi-annually and the first payment therefore due six months after issuance.

Total interest payable in fiscal '88 was estimated to be $44 million. This amount, by law, is to be reimbursed, beginning in fiscal year '89, by the Department of the Treasury. In fiscal 1989 the interest rate on the debt obligations issued by the Financial Assistance Corporation ranges from 7.7 percent in the first quarter to 7.3 percent in the last quarter. Total interest payable in '89 from obligations issued in '88 and '89 was estimated at $132 million. The total to be reimbursed through appropriations in '89 is thus $175 million.

While the Congressional Budget Office figure was somewhat greater - I believe CBO called for $210 million -- the difference between the CBO figure and the Administration's estimation of $175 million is based on different forecasts of interest rates.

The Assistance Board cannot predict with accuracy the amount of debt obligations that may be issued for financial assistance in fiscal year 1989 with any degree of certainty. I believe the $175 million request now in the budget reflects the best possible estimate of interest costs on future Financial Assistance Corporation debt obligations, based on projected economic data and on the current financial condition of the Farm Credit System.

It is important to note that this prediction is an estimate, and may change due to a number of factors, such as changes in interest rates and the financial condition of System institutions. The Board, to date, has received requests for financial assistance from four Federal Land Banks and one Production Credit Association. The severity of their financial problems vary; some require immediate attention, others are less urgent--nonetheless, all are important. But in no case could I tell you today how much or exactly what kind of assistance will be required.

We are in the process of visiting each institution that has applied to the Board for financial assistance. Our staff is examining carefully all aspects of each institution's financial and operational condition and making requests for additional financial information. Our eventual action in each case will be tailored to the particular situation.

The Assistance Board, chartered on January 21 of this year, is not yet three months old. I am proud of our progress, and I believe we have done well in carrying out the intent of Congress, meeting and perhaps exceeding expectations. The Act required that within 15 days of its charter, the Board retire the Capital Corporation stock. We met the deadline, returning more than $113 million to System institutions that are stockholders of the former Capital Corporation.

Last month we completed agreements that permit in the retirement of equities or "frozen stock", at par value, valued at more than $20.5 million. The equities are held by farmer borrowers in production credit associations in liquidation, in the Omaha and Spokane Farm Credit Districts. These borrowers had been unable to retire their stock since the PCAs went into liquidation, in some cases more than two years ago. This stock retirement comes at a very opportune time, as spring planting season is upon us. You will see attached to my testimony a list of the production credit unretired stock and equities held in each association.

By operation of law, the Assistance Board succeeded to 44 pending lawsuits filed against the former Farm Credit System Capital Corporation. Nineteen of these suits challenge the assessment process established under the Farm Credit Amendments Act of 1985. Eight of the assessment cases now have been dismissed, either through Court Orders or stipulated dismissals. Of the remaining eleven lawsuits, only five involve plaintiffs that paid assessments. In addition, four non-assessment cases have been dismissed. Thirty-two suits remain outstanding. The Assistance Board is actively pursuing through the Department of Justice various options in an effort to bring about a dismissal of the assessment cases and other lawsuits in which the Capital Corporation was involved.

The passage of the Agricultural Credit Act of 1987, combined with our efforts since then to implement the Act as quickly and efficiently as possible, has resulted in increased investor confidence, reflected in the narrowing spread between System bonds and Treasury obligations of comparable maturity. The attached graphs illustrate how the spread narrowed from a peak of 150 basis points last October. Today that spread is around 44 basis points. That could save the Government and the system several hundred million dollars in the next several years.

As you know, Mr. Chairman, the Act authorizes funding for the operation of the Assistance Board through the Farm Credit Assistance Fund, established from the proceeds of debt obligations issued by the Farm Credit System Financial Assistance Corporation. The Assistance Board budget, therefore, does not draw on U.S. tax dollars for its operating expenses (though the U.S. Treasury will pay some interest on this amount). Since our budget constitutes an additional expense to the System, we are keenly aware of our responsibility to control our costs as much as we can.

I want to emphasize, Mr. Chairman, that while we have a relatively small staff, we are moving as rapidly as possible to get the job done. It is impossible for me to identify today a specific dollar amount needed for interest on the debt obligations for financial assistance. However, I can absolutely assure you that the Assistance Board, after determining that an institution should be certified to receive financial assistance, will do its best to authorize only the issuance of such debt obligations as necessary in accordance with the law and Congressional intent -- no more and no less -- to provide the proper amount of assistance in each case.

Thank you, Mr. Chairman. I will be happy to respond to your questions.

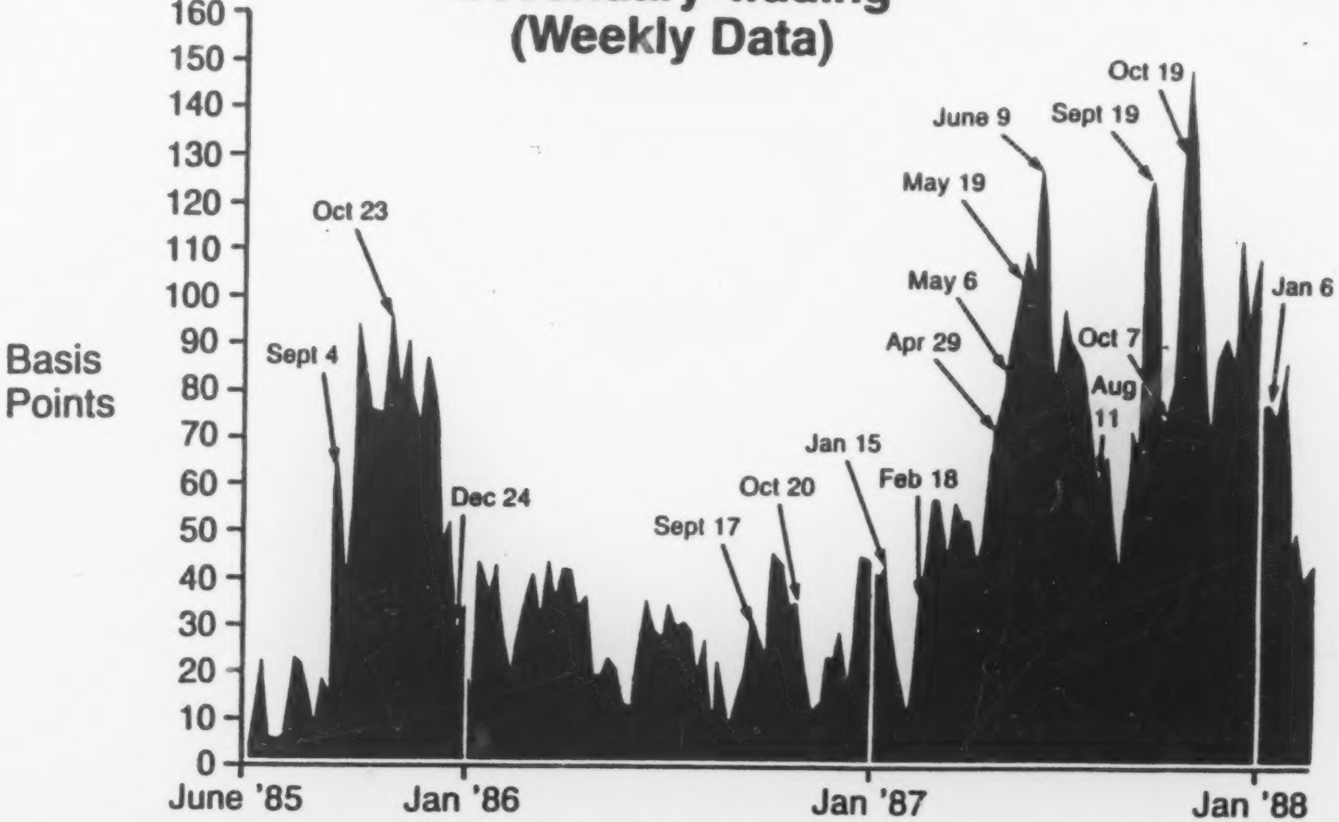
Farm Credit Services - Twelfth District
Summary of Frozen Equities
as of February 29, 1988

	A Stock	B Stock & Participation Certificates	Allocated Surplus	Total
Glendive PCA	$ 6,400.00	$ 2,335,266.09	$ -0-	$ 2,341,666.09
Milk River PCA	34,165.00	2,914,715.47	-0-	2,948,880.47
Western Montana PCA	2,015.00	4,716,070.06	607,096.90	5,325,181.96
Western Washington PCA	300.00	4,319,092.56	-0-	4,319,392.56
	$42,880.00	$14,285,144.18	$607,096.90	$14,935,121.08

Federal Intermediate Credit Bank of Omaha
Summary of Frozen Equities
as of December 31, 1987

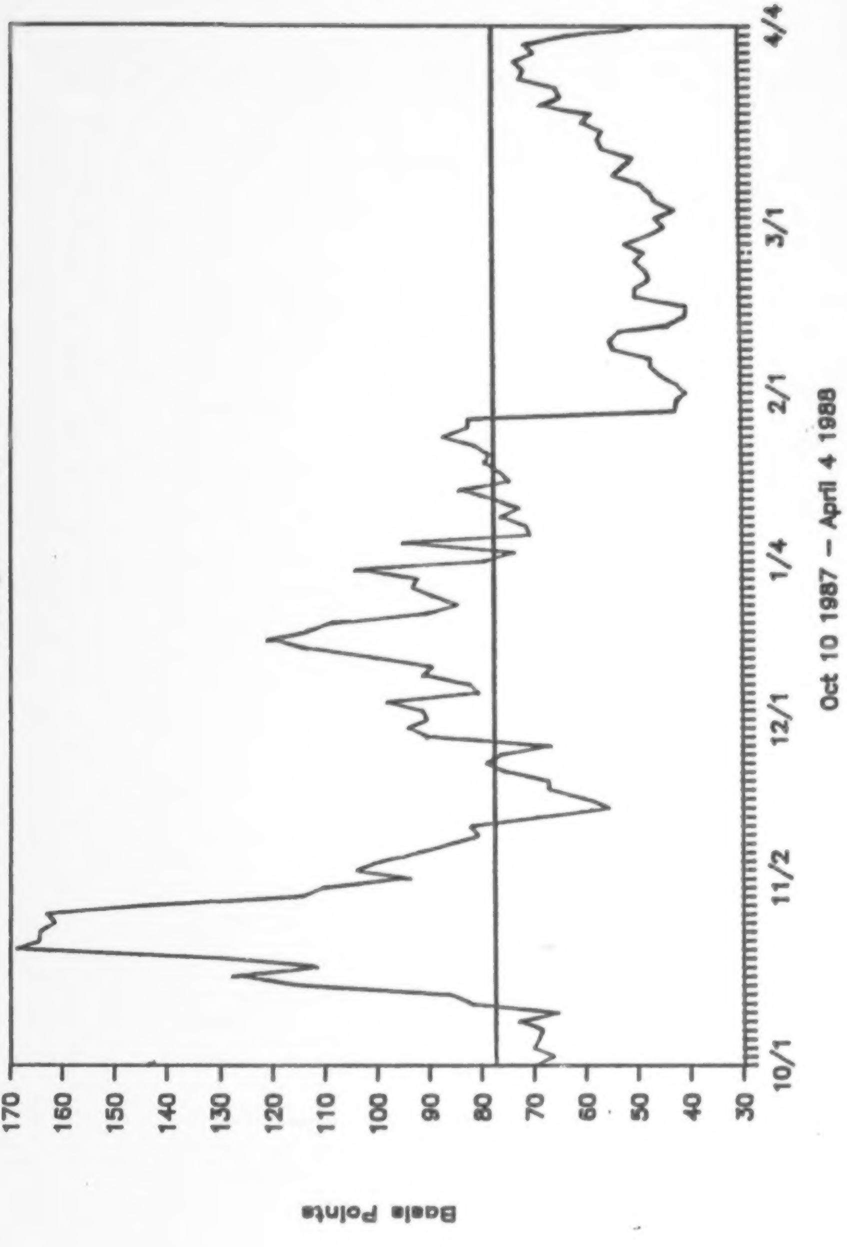
	Class A Capital Stock	Class B Capital Stock	Participation Certificates	Total
Valentine PCA	-0-	$ 3,434,530.00	$ 21,145.00	$ 3,455,675.00
O'Neill PCA	$ 1,750.00	2,130,475.00	35,290.00	$ 2,167,515.00
	$ 1,750.00	$ 5,565,005.00	$56,623,190.00	$ 5,623,190.00

Spread Between 6-Month FFCB & T-Bills
Secondary Trading
(Weekly Data)



YIELD SPREAD B'TWN 6—MO FFCB & T—BILL

Closing Bid Yields



AVAILABILITY OF OPERATING LOAN FUNDS

Senator BURDICK. Mr. Clark, I note from your April 8 obligation report that roughly 30 states have used up all their direct operating loan money. In addition, about 14 states have used up their direct ownership loan money. It strikes me that this is very early in the year for you to be out of money in many of these states and spring is really just now happening, and the farming operation is getting underway.

While I recognize that many of these states have guaranteed money left from these programs, it would seem that the guaranteed program just has not been as popular as the direct loan program. What is the availability of credit through the Farmers Home Administration for farmers who need it?

Mr. CLARK. The latest information I have, Mr. Chairman, is that about 12 states have used their entire year's allocation. However, they are not out of funds because we are funding, on a weekly basis a portion, if not all, of their operating loan requests from the national pool.

So we are watching it very closely. We went through this same experience last year. Although it is like skating on thin ice a bit we utilize and allocate those funds on an equitable basis nationwide. Some states may be panicking, but we are not. We believe we can take care of their requests, but we cannot do it overnight. Requests are being dealt with on a week-to-week basis.

Senator BURDICK. I am wondering if you could supply for the record or otherwise who those 12 states are.

Mr. CLARK. We would be happy to do that.

[The information follows:]

The listed states have used their entire year allocation and have requested additional funding: California, Georgia, Idaho, Indiana, Massachusetts, Mississippi, New Jersey, North Dakota, Pennsylvania, South Carolina, Virginia, Washington, and Wyoming.

Senator BURDICK. I might ask a supplementary question. Is North Dakota involved in the 12?

Mr. CLARK. Yes; North Dakota is over its allocation about $1 million and we are working with that state directly.

Senator BURDICK. In other words, you are telling me right now, in spite of the situation, all creditworthy borrowers will be able to get money?

Mr. CLARK. As of today, I believe that is true. We have about $200 million remaining out of $900 million available for direct loans. Again, we want to keep the momentum going on guaranteed loans. We obligated more guaranteed loans last year than we have ever done before. We booked $1.6 billion in guaranteed farm ownership and farm operating loans last year, more than the $1.3 billion we did in direct loans. The transition from direct to guaranteed loans is happening and I believe we need to keep that momentum going in the field.

So if anything, we might be keeping some of those states' "feet to the fire," to be sure they are selling the guaranteed program.

Senator BURDICK. This is April. What do you see down the road?

Mr. CLARK. If we get through this month, I think we are all right. I believe we will take care of those direct loan requests. However, the volume of requests is down. Our total obligations are down almost 30 percent for the whole year compared to a year ago. Even our guaranteed loans are down about 15 percent. So the whole demand for credit nationwide seems to be less this year. I think this is a very positive note. Many farmers made a profit last year in many parts of the country. So, I feel this is an upbeat situation. We are thinking positive.

Senator BURDICK. Do you anticipate any transfers from the emergency loan program or any other loan programs to this area?

TRANSFER TO GUARANTEED FARM OWNERSHIP LOANS

Mr. CLARK. Well, our Farm Credit System pilot program mandated by the Agricultural Credit Act of 1987 requires us to make available another $250 million guaranteed farm ownership loans. That transfer has been made from guaranteed operating loans to the guaranteed farm ownership loan program.

We are now just getting full force into that pilot program with the Farm Credit System. We have a memorandum of understanding signed with them and are now getting that process underway to help dispose of some of their inventory land.

That is the only transfer that has been made to date. I don't intend to ask the Secretary to make further transfers, because I think we can take care of the demand with what we have.

Senator BURDICK. Senator Grassley.

NATIONAL RURAL DEVELOPMENT FINANCE CORPORATION

Senator GRASSLEY. Thank you, Mr. Chairman. I appreciate very much the opportunity to come here, and first of all, to thank you, Mr. Clark, for what you did over the last year. Senator Harkin and I raised a great deal of Cain with you about whether or not we would get the National Rural Development Finance Corporation off the ground, and you did, after that meeting, issue regulations. I want to say that I appreciate your testimony here this morning and commend you for the work that you helped us do in the last year getting this program, which was really set up in 1985, off the ground.

I held meetings during our March recess in Iowa, kind of like economic development meetings, in which this program was the showcase. I think that we are going to be able to use this program in Iowa for diversifying the economy.

The response of Iowa small business people, economic development officials and bankers, was tremendous. I felt it was important that before I asked you any questions on other programs today, I wanted to tell you that your recent work in bringing this program to fruition is very much appreciated.

Mr. CLARK. Thank you, Senator.

WRITEOFF OF DELINQUENT DEBT

Senator GRASSLEY. You and I are both aware of the interest that was created by the recent New York Times article detailing the $7 billion bail-out slated for the Farmers Home Administration borrowers. I noticed in an article by the Agridata News Service later that week that Marlyn Aycock, your Public Information Officer—and I don't know whether I pronounced that name right——

Mr. CLARK. Aycock.

Senator GRASSLEY. You know who I mean. He corrected the initial reports by stating that they were, and I quote him, "extremely misleading," and by saying, and I quote him again, "There is little chance that anywhere near that amount will be written off."

I am wondering if you could explain how such a misleading story was leaked and especially to a major metropolitan newspaper like the New York Times.

Mr. CLARK. We were accused of issuing press releases on that New York Times article. We did not. The story began with an investigative reporter from the New York Times who went back to my testimony of a year ago given before a Senate committee having to do with the Senate's suggestion of providing a write-down provision to service our delinquent borrowers. That investigative reporter worked from that year-old testimony and drew some conclusions of his own.

But I must tell you, Senator, it is true: We will probably be writing off from $8 to $9 billion over the next couple of years. The Agricultural Credit Act is responsible for a sizable portion of that writeoff. The act requires us to reduce the debt of some delinquent borrowers to the recovery value of the collateral if repayment would at least equal the revenues from that foreclosure.

We estimate that in the first year, about $2.1 billion could be written down as a direct result of the Agricultural Credit Act of 1987. Additionally, another $6.7 billion in debt held by borrowers who will not cash flow, even with a write-down, will be lost.

So we are looking at a fairly sizable write-down in the next few years, and I would say that the Agricultural Credit Act of 1987 is responsible for accelerating the pace of those write-downs. So although the subordinate who issued that statement based his conclusions on an incorrect source, those conclusions are very close to the numbers that have since become available.

Senator GRASSLEY. So then it isn't the New York Times article that is wrong; it is right. Mr. Aycock is wrong. That story was not extremely misleading or, in other words, instead of where he says there is little chance that anywhere near that amount will be written off, you are saying that more than that will be written off.

Mr. CLARK. That is true, Senator. Many in our agency have rose-colored glasses and don't like to admit that. At the worst, however, that is what is going to happen.

FMHA WRITEOFF REGULATIONS

Senator GRASSLEY. Whether the story in the New York Times was right or not, the basis for my next question would still be the same, because what I think is confusing or maybe even disturbing about the New York Times article would be this: That the article was supposedly based on your new regulations, and those regulations haven't been written yet, right?

Mr. CLARK. No. They are not yet completed.

Senator GRASSLEY. At least I called your office, and I wanted to see the regulations on which the story was written, and I was told that these regulations weren't available; they were available? I was told I couldn't see them. Are you saying that I could have seen them?

Mr. CLARK. No, Senator. They were not in a form that would make any sense to you since they were in the formulation stage. We are working long hours now to finalize and publish them.

Senator GRASSLEY. Could I ask, then, if the regulations aren't out, how can we really say, either in the case of the New York Times article or in the case of what you just said to me in public comment here, that we are going to lose so much money if you can't release the regulations for Members of the Senate to read or if they have not been sent to the Office of Management and Budget for approval? How could we be making that determination or even the statement you just made to me if we don't have the regulations written?

FMHA IMPACT STUDIES

Mr. CLARK. The regulations are now being edited for final review, Senator. However, a part of those regulations is a requirement that an impact study be made. The study is a major regulatory requirement. We are required to conduct studies to demonstrate the validity and cost of FmHA regulations.

In compliance with requirements, we did random sampling in the field, and impact studies are now being completed. Our Economic Research Service finally came forward with those numbers. The numbers are actual numbers relating to our delinquencies, and applied to our portfolio indicating what our total portfolio is going to be. These are not numbers drawn out of the air; they result from careful calculations carried out by our Economic Research Service.

Senator GRASSLEY. Based on the prospective regulations or regardless of the prospective regulations?

Mr. CLARK. Both. They are based upon present regulations and future regulations mandating new servicing options such as the writedown provision of the Agricultural Credit Act.

Senator GRASSLEY. How soon do you think we will be able to see a preliminary draft of the regulations, and would you share it with this committee, not just this Senator, but this committee?

Mr. CLARK. The regulations should be out for public comment soon and certainly the committee and any member of the public who desires can review them. It will be several weeks yet before those proposed regulations will be issued for a 30-day comment period. The entire process will take several weeks yet.

It will be a real race with the calendar whether we will meet the statutory deadline of June 3. How closely we make that deadline will be determined by the amount of public comment that we receive. The more public comments we receive, the longer it will take to respond to them.

We are working almost around the clock on those regulations. We have put in over 20,000 hours drafting them. Most of those hours were outside the normal working day, in early mornings, in the evenings, and on weekends. So we are struggling hard to issue the regulations. The process should take only a few more weeks.

Senator GRASSLEY. Mr. Chairman, I am going to submit the rest of my questions to both Mr. Clark, and then I have some questions for Mr. Thor. I would like to split them for answers in writing.

Senator BURDICK. Fine.

Senator Cochran.

Senator COCHRAN. Mr. Chairman, thank you. I think I will start with my questions of Eric Thor. I appreciate the statement that has been made about the Agriculture Credit Act and the work of the Assistance Board.

I think there has been an indication of enthusiasm and dedication to purpose in this Assistance Board and of the leadership that Eric Thor has provided in getting that Board moving that is commendable. I think that is something the committee ought to take note of, and Mr. Thor ought to be commended.

However, in looking at the staffing of the Board, I wonder whether you have enough people involved and whether the budget that was submitted reflects the need that exists for processing requests for assistance. The old Capital Corporation that the Board, in effect, replaces, had about 800 employees. You have only 20 on your staff, as I understand it.

Do you think you will be able to get your work done with that limited number of people? What is your expectation about how quickly and efficiently you will be able to respond to requests for assistance with this small number of people?

Mr. THOR. Senator, we have tried to design a workable arrangement with the Board and with the Secretary of Agriculture and the Secretary of the Treasury that will avoid the bureaucratic pitfalls of large organizations but at the same time retain useful elements of the government structure and resources.

Our tasks are streamlined compared to the Capital Corporation. We do not hold individual loans or properties, except those inherited from the old Capital Corporation, which we are in the process of disposing of. The Assistance Board, as the act provides, can supplement its resources as needed with the support from USDA, FCA, and Treasury.

We will not hesitate, and I underline that, to get additional manpower we might need for special projects and situations through contracting or detailing. I am confident at least, that we can get the job done efficiently and still keep an economical, lean organization to this temporary board.

Senator COCHRAN. One thing that we want to be sure that we do is get results, and I think that can be measured in the ultimate approval and support of the Farm Credit System program by farmers and ranchers who will be borrowing from the System and who are stockholders of the System.

Do you think that the Farm Credit System will be able to provide competitive credit in all areas of the nation under the terms of the Farm Credit Act that was passed?

Mr. THOR. As you know, Senator, the Chairman of the Farm Credit Administration testified a couple of weeks ago and outlined a number of operational problems that the System still has. The Assistance Board has a much narrower focus, only dealing with those that are in severe financial difficulty.

It is my opinion it will be a number of years before we can make it a completely competitive system for the farmers and ranchers. But do take note that the Assistance Board very early on has decided that farmers and ranchers are really the most important part of the system. As one of our very early tasks we have tried to get the money back out of the Capital Corporation in time for spring planting, and we retired the frozen stock. Farmers and ranchers will be the kingpin of our decisionmaking process.

Senator COCHRAN. This is of particular concern to me because the Jackson District, as you know very well, is one of the problem areas. I wonder when we can expect to see farmers and ranchers in that Jackson District able to obtain long-term credit from a Fifth District System bank.

Mr. THOR. Senator, we, as you know, are having a number of meetings. In fact, we met with the Board of Directors of Jackson last week. They have submitted a new proposal to us. This is the new proposal. We are in the process of evaluating it; we received it Saturday with additional information Monday morning, and are working around the clock and worked all weekend analyzing parts of it.

We will do that as expeditiously as possible. They have a large amount of debt coming due on or before June. We have to move with haste, and I will assure you we will move as quickly as possible in that area.

Senator COCHRAN. I know that the act requires the merger of the Federal Land Banks and the Federal Intermediate Credit Banks within 6 months from the effective date of the law which is January 6. Do you think that these mergers will be consummated on a timely schedule?

Mr. THOR. This is one of the options that all of the financial institutions, including the Jackson Board, is considering. They met on Tuesday. I haven't heard their final deliberations on that particular option. I have no information which would suggest that they are not moving forward on a timely basis, and I have been assured that they will go ahead with that process as required.

Senator COCHRAN. Do you have any estimate you can give us now as to when the Board will make a decision on the Jackson request?

Mr. THOR. Again, we are working today with the Board itself. I do want to point out that FCA must approve those merger plans, and so we are working with the regulators to seek concurrence, also, from them.

Senator COCHRAN. We appreciate your attention to that problem. We feel it is a matter of some urgency, and we hope that we can see some results and some good decisions made, not only by the Assistance Board under your leadership, but also by the local officials who have a responsibility, too.

We appreciate your personal attention and involvement in this to the extent that you have been involved in it. We appreciated that very much.

Mr. Chairman, I have some comments about the overall budget request which I would like to make.

SOME GOOD NEWS IN BUDGET REQUEST

I think there is some good news in this budget. Everybody usually picks out the bad and criticizes it and complains and argues over it, but there is some good news in this budget. For example, farm operating loans will be increased under this proposal from $3.1 billion to $4 billion in 1989. For the first time in several years, the budget includes money for water and waste disposal loan and grant programs, the Business and Industrial Loan Guarantee Program, and the Community Facilities Loan Program of the Farmers Home Administration. In addition, there is a contemplated expansion of the Federal Crop Insurance Program. It is expected to provide coverage for 61 million acres in 1989. That is a 3 million acre increase from 1988.

However, there are some concerns that we have. I think we should support the existing rural housing loan and grant programs. I think the proposed voucher program would destroy this program in rural areas. I don't think it will work. Also, Federal Crop Insurance loss ratios continue to be a problem. Loss ratios have been unfavorable for several years.

These are all activities and programs of tremendous interest and importance to various parts of the country, including my state of Mississippi. The subcommittee will be reviewing these program requests very carefully as we proceed in this appropriations process.

In regard to crop insurance, let me ask Mr. Marshall what his plans are about attracting new business? I think we have to get some new farmers into the program. We can't just have those who are expecting to have losses every year participating in the crop insurance program.

What is your plan for getting some new people into the crop insurance program, getting them to buy some insurance?

Mr. MARSHALL. I share that concern, Senator, and it is receiving my highest attention. I think there are a number of reasons why participation hasn't expanded as much as we would like to see it, among them being the effect of set-aside programs, taking away potential insured acres and some other factors. I think the program is very complicated, and I think that it is a difficult sales job for our agents.

I have made some trips recently, had many discussions with insurance agents, master marketing agents, as well as our reinsured companies, and am surveying the landscape myself and putting together a strategy.

In fact, in a couple of weeks, I have called a summit meeting, you might say, of representatives from everyone in our delivery system to come together and get around the table and roll up our sleeves and see what we can do about identifying those obstacles to market penetration and developing a strategy.

It is a very high priority, I can assure you, and something that I hope to have some good progress to report back to you on very shortly.

Senator COCHRAN. We wish you good luck in that. We think that is a very important part of the effort that you ought to be making, and we wish you well in that enterprise.

Mr. MARSHALL. Thank you, sir.

OPERATING LOAN FUND AVAILABILITY

Senator COCHRAN. Mr. Clark, I welcome you and say that we have also gotten some calls like the chairman was talking about from people back home who worry about the availability of operating loan money. Some are pretty angry about the fact that this early in the year they are out of money. When they hear that, they think, well, that is about as bad a piece of news that you could get.

The Farm Credit System down there has problems, and with the Farmers Home Administration operating fund depleted at this early date, it gives a lot of them heartburn of the very serious kind.

Did I understand you correctly that there is going to be some money in a pool left over from areas of the country where you are not going to need the early allocated money and you will be able to make some additional funds available to states like Mississippi and North Dakota that are out of money right now?

Mr. CLARK. That is true. We have a national pool now, and probably within the next 30 to 60 days, we will distribute these resources. Demand from some of the most active states is down from previous years and we think there will be adequate funds. I hate the term, "We are out of money." That statement is a copout. We are not out of money. We have almost $200 million yet in direct funds and I think we can take care of our demand.

Senator COCHRAN. They plant early down there, you know, in Mississippi. [Laughter.]

Mr. CLARK. Unfortunately, your state plants early, too. [Laughter.]

We are trying hard to keep up with Mississippi's demand for operating funds, but it is very, very difficult.

Senator BURDICK. Senator, don't take it all. [Laughter.]

Senator COCHRAN. I know we have a vote coming up on the floor, Mr. Chairman. I am sensitive to that problem. Let me just ask this. Senator Grassley asked you some questions about debt write-down. I am not going to repeat his questions, but how many farmers do you expect to be able to save by the writeoff program?

BENEFITS OF WRITEOFF PROGRAM

Mr. CLARK. Senator, it would be unrealistic to expect a wholesale rescue of our most troubled borrowers under the new law. Our current estimate is that only about 16,000 out of a total of about 118,000 delinquent borrowers will benefit from this new law. Another 54,200 won't cash flow even with a write-down. We may be able to help another 37,000 with the servicing actions other than write-downs that are available to us: for example, rescheduling, deferrals and so on.

While we are willing to comply with the letter and spirit of the law as best we can, many of our borrowers are in such bad financial shape that even writing down their debt won't save them. It would be shortsighted, I think, to expect this new law to rescue every farmer who wants to stay on a farm. It is just not going to happen.

Senator COCHRAN. I yield back my time.

Senator GRASSLEY. Mr. Chairman, can I comment on that just for a moment, please?

Senator BURDICK. Certainly.

Senator GRASSLEY. Remember that the intent of Congress, Mr. Clark, was this: That the bottom line for the benefit of the government is the key point. In other words, if restructuring is going to recapture the debt and bring it in, then you make a decision to restructure. If you don't, you foreclose. See?

So the question isn't how much money is the federal government going to lose as a result of the act just passed by the Congress, because there was some that was going to be written off regardless. You aren't going to get it all. How much more is going to be written off as a result of the legislation ought to be what you ought to be talking about, because the benefit to the taxpayer and to the U.S. Treasury was the guiding line. Otherwise, we would have never gotten it adopted in the first place.

But yet it does demand, on your people throughout the United States, to make a good-faith determination of restructuring where the farmer can benefit and where the Federal Treasury can benefit.

POTENTIAL FOR WRITEOFFS

Mr. CLARK. That is true, Senator. Again, we are going to immediately realize, we think, about $2 billion in write-downs. The bad feature of that is it may become an ongoing occurrence. For example, a farmer who fails this year may come back to our window again next year and say, "Do it again for me. My land is now depreciated; my collateral is depreciated. Write it down once more, please."

The problem is that there is no limit or finality to the process. I believe that should be addressed in Congress.

Senator GRASSLEY. Well, the finality is that the person who you are making this deal with. again, under the law, he has got to make a good-faith effort.

Mr. CLARK. That is true.

Senator GRASSLEY. To carry out his commitment, and that is a judgment that you are in control of, maybe more control than maybe at times you ought to have, but somebody has got to make this decision. In this case you make the decision, and in other cases, bankers make it for other farmers.

But he has got to have a good-faith effort to do it. It is not just like we are saying, "You get another chance to fail," because we aren't saying that.

Senator BURDICK. Members of the committee, there is a vote on the floor of the Senate. I think we better have a recess for about 10 minutes. We will be back.

[A brief recess was taken.]

MANAGEMENT OF FMHA INVENTORY PROPERTY

Senator BURDICK. Mr. Clark, something happened in North Dakota this past January that disturbs me greatly. It has also disturbed many North Dakotans and reflected quite unfavorably on the Farmers Home Administration. The incident of which I speak is the burning of a farmhouse and a couple of other buildings on land that is in the FmHA inventory. I am sure you are aware of this incident.

After learning of this incident, I contacted Farmers Home officials in North Dakota to express my deep concern about their actions and to inquire as to the jurisdiction for the destruction of these buildings. The only explanation I received is that the expense of bringing the house up to Farmers Home standards would be greater than the value of the house.

Mr. Clark, I do not accept that answer, because the farm owner managed to live in that house and many other farm families manage to live in houses similar to the one Farmers Home destroyed. Farmers are not accustomed to cushy surroundings and are offended by the action of Farmers Home in burning this home down.

First, I would like to hear your views on this incident and whether it is FmHA's policy to destroy farm buildings that are situated on the inventoried property.

Mr. CLARK. I share your disappointment, Mr. Chairman. Good management practices on inventory lands suggest that the agency should perform some cleanup procedures. Unfortunately, the decision to burn the house was not a very good management decision. We should not be burning houses. There is no mandate out from me calling for burning as a method of disposing of unsafe or unwanted structures on a property.

A contractor was hired to demolish the building. He took "demolish" to mean any way he could, and so he burned it. That was unfortunate. However, I wish I had a "before" picture. All reports are that it was an unsafe structure that was settling on its foundations and was just too costly to repair. As a result, the decision was made to demolish that building.

I am not sure the decision was a good one, but it was done. I don't think you will see that happen again to any other inventory property that we have.

Senator BURDICK. That isn't the question. The question is: Does this farmer have available to him the provisions of the Credit Act? He still has a chance to keep his house and barn and land. So if he redeemed it under the act, private property was gone.

Mr. CLARK. He did attempt to redeem it shortly after foreclosure and was unable to qualify. He was ineligible to move into that property.

ELIGIBILITY CRITERIA FOR HOMESTEAD PROGRAM

Senator BURDICK. Is there anything in the present law to prevent him from applying for homestead rights? Do you have anything in the law to prevent him from applying right today?

Mr. CLARK. There is nothing that I am aware of that would indicate a significant difference between his application today and his application of 2 years or a year and a half ago. As you know, the Agricultural Credit Act allows relatives to be eligible. If the original applicant did not want the property, his children would be eligible to apply.

There were some income restrictions before; however, they are no longer in existence. I don't think there was any eligibility problem of that nature with him.

REPURCHASING UNDER THE AGRICULTURAL CREDIT ACT OF 1987

Senator BURDICK. But my point is under the Credit Act that we just passed, even though the period of redemption expired, he had a right under that act to apply for purchase of that property back again.

Mr. CLARK. He originally applied and was rejected. He could have reapplied under the new act.

Senator BURDICK. That was before the period of exemption expired, I believe, wasn't it?

Mr. CLARK. It was within the period that he had to do it, and I don't know if that was 60 or 90 days. I understand he applied and was rejected.

Senator BURDICK. We understand that he would have a chance to apply under the Credit Act.

Mr. CLARK. Yes; he could apply.

Senator BURDICK. Yes; and if you saw fit to approve it, he would have a purchase agreement.

Mr. CLARK. That is possible.

Senator BURDICK. If he did that and it were favorable, then part of his property is gone.

Mr. CLARK. Yes; that is right. You can't bring it back; it is gone.

Senator BURDICK. Do you think that was a proper thing to do?

Mr. CLARK. No; I don't. I think we should have been more tuned in to that problem, and I hope we are now. The horse is gone, but we have closed that door.

Senator BURDICK. But the horse still wants that farm. He couldn't use the Credit Act to the best of his ability. So how are we going to square out his equity in the future now, for him?

Mr. CLARK. That borrower still owes us several hundred thousand dollars, although I know that is not the issue here. Incidentally, the Farmers Home Administration did not foreclose on that farm; the land bank foreclosed on that farm. We took it to protect our second lien provision.

Senator BURDICK. I understand that, but you are the one that burned it down.

Mr. CLARK. That is true. There may be another property available he might want to apply for. I think we could encourage him to apply if he hasn't done so already.

Senator BURDICK. If he is found eligible, will you rebuild the house?

Mr. CLARK. Don't you think that is asking a bit much?

Senator BURDICK. I am asking.

Mr. CLARK. I believe it is an inappropriate request. I don't believe we should do that.

Senator BURDICK. No restitution for him at all?

Mr. CLARK. No.

Senator BURDICK. Just burn it down and let it go?

Mr. CLARK. Senator, if that occurred in Missouri, we probably never would have heard about it. However, in North Dakota, those incidents seem to fester and grow.

Senator BURDICK. We don't burn down houses in North Dakota; that is true.

Mr. CLARK. The Farmers Home Administration did not give the order to burn it, either. It happened through a contract. I regret that.

Senator BURDICK. Somebody in authority must have authorized the striking of the match; somebody did. Somebody had to authorize that.

Mr. CLARK. Excuse me?

Senator BURDICK. Somebody must have authorized the burning of those buildings?

Mr. CLARK. A contract was awarded to demolish the building. The contractor made the decision to burn it.

Senator BURDICK. But your institution signed the contract and authorized it.

Mr. CLARK. Well, if you suggest that we add, "Do not burn" in the future, when we say "demolish," I guess we could consider that.

Senator BURDICK. I understand, Senator Sasser, that you wanted to ask a question in a hurry.

Senator SASSER. Well, I would like to make a brief statement, if I could.

Senator BURDICK. Please go ahead.

NEED FOR RURAL ECONOMIC DEVELOPMENT

Senator SASSER. Mr. Chairman, I am chairing the Military Construction Appropriations Subcommittee. I wanted to come over here this morning to these very important hearings and just make a brief statement, if I could. I appreciate the courtesy that the chairman has extended me here.

I would like to address my comments to Mr. Clark as they concern activities of the Farmers Home Administration. As many of my colleagues are aware, I am very concerned about the development or lack thereof in our rural communities.

I feel that we do have an obligation to ensure the future of these communities and their people. Now, I have always felt that the Farmer's Home Administration would be one of the main arms of the federal government in assisting rural areas. After all, that is one of their stated purposes and one which I understand that you restated today, Mr. Clark.

Now, in reviewing the proposed budget for the Farmers Home Administration for this year and in past years, I don't find that the requests fall in line with the objectives of rural economic development.

BUSINESS AND INDUSTRIAL LOANS

For example, the business and industrial loan level for 1989 calls for $95.7 million. While this is in line with last year's request, this level has dropped dramatically in the last decade. I am sure we will all recall that the level in 1978–79 was over $1.1 billion for rural economic development through business and industrial loans.

Now, this reduced funding is certainly not the direction that I think we ought to be headed for in our rural communities.

RDIF DECREASE IN FUNDING

The Rural Development Insurance Fund will see a decrease of $126 million under the administration's budget request. This is something I submit we simply cannot allow. I agree we must all make efforts to work toward deficit reduction, and I am down the hall doing that right now, Mr. Chairman, on the Military Construction Appropriations Bill.

Over there, we are appropriating $10 billion to build military bases here and around the world. However, the low levels that we are seeing here or the requests for low, low levels just aren't adequate. They cut funds down to the bare minimum. It appears that we are forsaking rural development and that the Farmers Home Administration is forsaking rural developments with these requests.

What is most upsetting about it is that at the same time that they are cutting these requests for business and industrial loans, the Farmers Home Administration and their media operation over there are grinding out press releases like this one, which infer that they are continuing to support rural development by directing a high number of their loans to areas of high unemployment.

While this may be true of their efforts, it is certainly not the case in results. For example, in my state, last year only four business and industrial loans were approved by the Farmers Home Administration. This statistic is backed up by a lot of mail that I receive from communities across my state which tell me that they tried for years to develop small business but they cannot establish the infrastructures to support the firms.

So I am really opposed, Mr. Chairman, by the appearance that the Farmers Home Administration is trying to project, it appears to me, as opposed to the reality of what our rural communities are really experiencing.

I came here today to address my concerns to Mr. Clark and to say that I trust that this is a problem which he will be working to remedy.

Thank you, Mr. Chairman.

[The referenced press release follows:]

FmHA Proposes To Direct Business Loans to Smaller Companies

Washington, April 4—The U.S. Department of Agriculture's Farmers Home Administration has proposed to direct a higher proportion of its business and industry loan guarantees to smaller companies in areas of high unemployment, FmHA Administrator Vance L. Clark said today.

The proposal would change some of the rules of the FmHA Business and Industry Loan Guarantee Program, which furnishes guarantees for loans made by conventional lenders to provide jobs by establishing or expanding businesses in rural areas.

"As a general policy, we want to gear the limited B&I loan funds to smaller businesses in areas where they can provide jobs for rural people, especially displaced farmers," Clark said. "It's our experience that smaller enterprises usually are more labor intensive as well as locally owned and financed."

Under the proposal, loan guarantees would range from 70 to 90 percent of loan value, with the higher guarantees reserved for smaller loans.

The proposal would also permit state FmHA directors to waive, in some cases, certain costly application requirements, such as outside feasibility studies, independent appraisals and audited financial statements.

In addition, the proposal would create a point system for determining priority among B&I applications, based on which guaranteed loans generate the most jobs at the least cost in areas of high unemployment.

This proposal is in keeping with the administration's Rural Development Initiative, Clark said. "The proposed regulations would enable Farmers Home to direct federal dollars where they will do the most good in revitalizing rural America," he said.

The proposal was published March 29 in the Federal Register.

AGRICULTURAL CREDIT ACT HOMESTEAD PROVISIONS

Senator Burdick. Mr. Clark, getting back to the house-burning incident, as I understand it, the former owner has asserted he has certain rights under homestead provisions. Did FmHA determine whether the former owner retained rights to the homestead pursuant to the Agricultural Act of 1987?

Mr. Clark. The contract was signed prior to the Agricultural Credit Act of 1987, Mr. Chairman, so there was no consideration of a policy that did not yet exist.

Senator Burdick. Was the house burned before the 1987 act became law?

Mr. CLARK. I believe it was within a few days after the act had been signed and before instructions were issued to the field.

Senator BURDICK. But the law was in place at the time of the burning?

Mr. CLARK. I am sorry?

Senator BURDICK. The law was in place; it was a fact, at the time of the burning?

Mr. CLARK. By the calendar, yes.

FMHA INVENTORY PROPERTY DISPOSAL DIRECTIVES

Senator BURDICK. Yes, it was.

Have you issued any directive against burning any more houses?

Mr. CLARK. I have indirectly, Mr. Chairman, in speaking before a policy group meeting of all of my 46 state directors. I think they have received that message.

Senator BURDICK. Have you sent out a written directive on this?

Mr. CLARK. No, sir, we have not issued a directive.

Senator BURDICK. Statement?

Mr. CLARK. No, sir, we have not issued a formal administrative statement.

Senator BURDICK. Informal?

Mr. CLARK. Yes.

Senator BURDICK. Could we see a copy of it?

Mr. CLARK. Certainly.

Senator BURDICK. Thank you.

[The information follows:]

[The following message was sent via electronic mail (Telemail) to all FmHA state directors on Tuesday, April 12, 1988.]

APRIL 12, 1988.

Subject: Farm House Burning in North Dakota
To: State Directors

The Administrator was recently interviewed by USDA Radio on the subject of the farm house burning in North Dakota. Because the Administrator's position on this matter was clearly articulated in the interview, I thought you should have a copy of the transcript which follows:

Cut 1

ANNOUNCER. The Administrator of the Department of Agriculture's Farmers Home Administration says there will be no more farm house burnings. This is in response to the burning of a bankrupt North Dakota farm that has been taken over by the Farmers Home Administration. Under order from a FmHA district supervisor, a contractor burned down the homestead and some outbuildings on the grounds that the residence did not meet government standards and was not livable, however Farmers Home Administrator Vance Clark says the burning will not happen again.

CLARK. Well, it's a very unfortunate circumstance, of course—things that we don't like to see happen. We don't have an order out that we burn buildings on farms. There was a contract issued to allow the removal of buildings. The decision to burn it was made by the contractor, unfortunately. We don't like it, it shouldn't be done, and we're going to stop that."

ANNOUNCER. Clark says the State Director of North Dakota has been told to keep a closer eye on the administration's district and regional offices to keep this sort of thing from happening. In Washington, reporting for the Department of Agriculture, I'm Brenda Curtis.

Cut 2

CLARK He really needs to keep his finger on the pulse a little bit closer to be sure his people below him, his district supervisor and the county supervisors, are made more aware of the possibilities of this type of thing happening. I don't think you'll see it again in North Dakota or in any other state.

GAO STUDY OF FCIC LOSS ADJUSTMENT

Senator BURDICK. This question is to Mr. Marshall. Last year when GAO conducted a study of 134 claims submitted by reinsurance companies in five states, they found an error rate of approximately 95 percent for loss adjustments. In addition, GAO found that 31 percent of the $9,400,000 in claims from reinsured companies should not have been paid by $1 out of every $3 paid.

GAO criticized the FCIC on the types of problems that result in overpayment by saying, "Many so obviously appeared to be intentional."

What is the situation in regard to these payments?

CONCERN ABOUT OVERPAYMENT OF LOSSES

Mr. MARSHALL. Sir, I share your concern about the overpayments, and they are happening on both the types of claims administered by the reinsured companies and by FCIC. We are taking aggressive actions through our Compliance Division to follow up on all of the cases they investigate themselves, as well as those that they follow up on that are referred from GAO investigation and from our Office of Inspector General's investigations.

Specifically on those GAO cases, our Compliance Division is in the process of reviewing them; we are setting up receivables in our accounts, and we are going after the companies for the overpayments. If a producer is responsible for an overpayment; we are getting that amount from the producer.

I can give you, for the record, if you would like, the status, an update on the specific claims from the GAO report as well as those from the OIG or our Compliance Division.

Senator BURDICK. That is a big sum of overpayment, $2,900,000. There is something amiss in the office, isn't there, to pay that much when there is no merit to the claim?

Mr. MARSHALL. Excuse me, sir?

Senator BURDICK. That is a huge amount of money.

Mr. MARSHALL. It is a huge amount of money, and it is of great concern to us. The best corrective action we can take that we see, aside from following up and collecting the amounts that are deemed to be overpaid, is through tougher enforcement on the front end. We need to do a better job through our compliance activities of bearing down on the companies to strengthen their training; strengthen their following of our procedures; in delivering our policies more effectively on the front end and following our loss adjustment policies. In the collections and through better training and aggressive actions on those companies, we think we will see some improvement in the months ahead.

Senator BURDICK. How soon do you expect that improvement to show up in terms of——

Mr. MARSHALL. Well, sir, of the $2.9 million identified as overpayments by GAO, we have collected over $500,000. That is not a big sum, but the rest of those amounts are under appeal by the companies. We will be collecting those amounts subject to the outcome of the appeals in the months ahead.

In the long term, though, I don't think we are completely home free, and we won't be until the companies do a stronger job through training on the front end, and through our compliance efforts bearing down on the companies to do that, we should see some improvement with the 1988 crop year loss adjustment activities.

Senator BURDICK. In other words, you are adopting procedures to prevent this from happening again; is that correct?

Mr. MARSHALL. That is correct.

Senator BURDICK. Mr. Thor, you reiterate in your testimony that you cannot predict the amount of debt obligation that may be issued for potential assistance in fiscal year 1989, and you also say that you cannot tell us how much or exactly what kind of assistance will be needed.

What about 1988? This fiscal year is half over. You must have some idea of whether you will approach the issuance of $1.1 billion which was currently estimated for fiscal year 1988.

Mr. THOR. Senator, we have already taken steps with, basically, two groups to issue some assistance. We have, as I pointed out in my testimony, worked out a procedure by which the borrower stock can be retired in the Omaha and Spokane areas. We have also worked out a procedure whereby there was a limited purpose certification for the Jackson District that would allow us to operate.

As my testimony points out, we are less than 90 days old and have received approximately five requests. We are acting on those as expeditiously as possible. The majority of applications, frankly, that we have received are missing a number of major areas, including how they are going to manage credit in the future, how the board of directors work in the loanmaking activity.

Also, I am personally visiting with each and every group that has applied for assistance, and we are going forth on that basis. Do appreciate that these particular groups, all of them, are in the process of being analyzed by staff. Appreciate, also, that not until mid-April was the Financial Assistance Corporation, which is the group that will be actually issuing the securities to the investment community, up and operating. So that allows us to work until such time as we can evaluate those requests shortly.

Do appreciate that in 1988, the only impact will be that Treasury will have to pay the interest in 1989, and remember, the bonds are semiannual, so I think that we are making progress. We do need to move as quickly as we can, but I have no estimate other than what has been already prepared by the administration on the total amount to be issued this year, which, as I said, is over $1 billion.

Senator BURDICK. When that interest is paid, the interest a borrower cannot pay, when that interest is paid by one of these agencies, does it remain a debt against the borrower, and to the farmer, whoever he is?

Mr. THOR. Appreciate, Senator, that these are financial institutions, and they work directly with the borrower. To the degree that we work out assistance for any one of these institutions, the main impact on the borrower is to assure, as the act requires, that his borrower stock is paid at par. So that would be the main impact for the farmer and rancher in the local community.

Senator BURDICK. Do you feel that the $4 billion that is currently authorized for use in assisting troubled entities will be sufficient to see the system through this crisis?

Mr. THOR. I believe that the information I have received so far that it will be enough, if it is needed.

Senator BURDICK. If it is needed? We provided it for you.

Mr. THOR. That is correct.

Senator BURDICK. You must have needed it, or we wouldn't have provided it.

Mr. THOR. Senator, as I stated, I think there is a very delicate balance here. The $4 billion, at some point, and it is obviously 15 years down the road, has to be repaid by someone. So the more that we, in effect, lend on behalf of the System, the more that either the taxpayer and/or the System or the institutions or the farmers will pay in increased operating costs we will have to come up with.

Senator BURDICK. In other words, there is a possibility you won't use all of it, the $4 billion?

Mr. THOR. I wouldn't want to speculate at this time exactly where we end up.

SUBMITTED QUESTIONS

Senator BURDICK. There will be additional questions from the following Senators: Senator Grassley, Senator Reid, Senator Burdick, Senator McClure, Senator Bumpers, Senator Harkin, and Senator Cochran. I hope that you can get replies back to us as early as possible.

[The following questions were not asked at the hearing but were submitted for response for the record:]

FARMERS HOME ADMINISTRATION

QUESTIONS SUBMITTED BY SENATOR BURDICK

MEDIATION

The Agricultural Credit Act of 1987 established a program for Mediation of loan disputes. It is my understanding that the Secretary of Agriculture is in charge of certifying the Mediation programs for the various states. Once the certification is achieved, the state would then be eligible for matching funds appropriated for the program.

Question: What is the status of this program?

Answer: Section 503(a)(1)(B) of Title V of the Agricultural Credit Act of 1987 imposes an immediate duty upon the Secretary of Agriculture to participate in agricultural loan mediation programs. Shortly after enactment, we informed the governor of each state and the governors of the Commonwealth of Puerto Rico and Territory of Guam by letter of the certification process and the matching grant program that is authorized. We have received responses from 25 states and from the Commonwealth of Puerto Rico and Territory of Guam expressing interest in establishing a program and have received requests from 8 states for certification of existing programs.

Question: How many states, and which ones, have been certified to date? How many applications, and from which states, have you received?

Answer: We have received requests for certification from eight states. Seven states have been certified on an interim basis pending issuance of regulations to implement the certification process and matching grant program on a permanent basis. The States are Iowa, Minnesota, Mississippi, Montana, Oklahoma, Wisconsin, and Wyoming. It is anticipated that North Dakota mediation program will be certified upon receipt of additional information requested from the Governor.

Question: Are there any funds available for this program in 1988?

Answer: There are no funds available for this program in fiscal year 1988. Section 506 of Title V authorizes $7.5 million to be appropriated for fiscal years 1988 through 1991; however, no funds have been appropriated at this time.

Question: Have you rejected any state's application for certification? If so, which states and for what reason(s)?

Answer: We have not rejected any state's request for certification. In order to ensure that the requirements for certification are met, we requested additional information or clarification from 4 of 8 states that requested certification, namely Minnesota, Montana, North Dakota, and Wyoming. Of these 4 states, 3 have been certified since receipt of the additional information. We are still waiting for a response from North Dakota.

Question: Given the number of applications you have and the certifications that have already been completed, what funding would be required in fiscal year 1989 if the full authorization were to be used?

Answer: Besides the 8 states that have requested certification, we have received an indication of interest from 17 other states as well as the Commonwealth of Puerto Rico and the Territory of Guam. We anticipate that 7-10 additional states will request certification of their agricultural loan mediation programs during fiscal year 1989. It appears that an appropriation of $7.5 million, the amount of the annual authorization, will be needed.

Question: Can you make money available to this program without a specific appropriation?

Answer: No, we cannot make the money available to this program without a specific appropriation.

RDIF SALES (RURAL DEVELOPMENT INSURANCE FUND)

I understand that one of the Rural Water loans in North Dakota has recently been sold. Apparently before the sale, the borrower was given the opportunity to purchase the loan with a substantial discount; it could have purchased the loan at 76 percent of the value. Apparently, the borrower turned that offer down and then the loan was sold to a third party. Now, my understanding is that the Farmers Home Administration (FmHA) is allowing additional sales of other loans to be made to the borrowers themselves at 60 percent.

Question: Is this true?

Answer: During fiscal year 1987, FmHA offered community program borrowers an opportunity to purchase their loans at a discount. The average price was approximately 70 percent of the outstanding balance. Section 803 of the Agricultural Credit Act of 1987 requires FmHA to offer community program borrowers another opportunity, only this time Congress established certain pricing formulas to be applied, depending on whether or not the borrower used tax-exempt funds to purchase its loans. Generally speaking, borrowers which use non-tax-exempt funds will pay a lower price than borrowers that use tax-exempt funds. Each loan is priced separately. It is still too early in the program to determine what the average price on the loans purchased will be.

Question: Shouldn't every borrower be offered the same opportunity with its loans?

Answer: Most community program borrowers with loans still held by FmHA have the opportunity to purchase their loans under the new program. However, FmHA does not hold the loans that were sold last year; therefore, we have no control over them.

Question: Why has the discount increased from one period of time to another?

Answer: Under last year's program, all loans had to be purchased with non-tax-exempt funds and were priced based on the Schedule of Certified Interest Rates prepared by the Treasury Department. Under this year's program, in accordance with Section 803, loans may be purchased with tax-exempt funds, and if they are, will be priced again on the basis of the Schedule of Certified Interest Rates. This will result in borrowers paying approximately the same average price as last year, adjusted for any movement in interest rates since then. Section 803 requires that loans purchased with non-tax-exempt funds be priced based on last year's public sale. This results in a lower price for those borrowers.

Question: How many additional loans, and at what value do you expect to sell in fiscal year 1988 and fiscal year 1989 from the Rural Development Insurance Fund?

Answer: We estimate that FmHA will sell, through borrower purchases and public sales, approximately 4,500 loans with a net book value of $1.4 billion in fiscal year 1988, and approximately 3,750 loans with a net book value of $1.1 billion in fiscal year 1989.

REIMBURSEMENTS TO THE REVOLVING FUNDS

The reimbursement level for the revolving funds for both the Rural Housing Insurance Fund (RHIF) and the Rural Development Insurance Fund (RDIF) have gone up significantly. It is my impression that this increase is due to the asset sales which have taken place in both of those funds. Because of the discount at which the loans are sold, the funds show a loss of the discount amount and, therefore, a loss to the Government. Therefore, in fact, it would appear to me that the asset sales have not, in fact, generated savings to the Government but have resulted in bottom line losses.

Question: Is this impression correct?

Answer: Yes, it is correct that most of the increase in the reimbursement levels are due to the discount on the loans sold. The discount on the RHIF sale was $1,028,717,754 and the discount on the RDIF sale was $861,879,456. Much of the discount is due to the interest rate environment at the time the loans were sold compared to the interest rates on the loans themselves. Based on an internal study, FmHA determined that note sales resulted in a much lower net opportunity costs to FmHA, over the life of the loans sold of approximately $449 million in the case of the RHIF sale and $234 million for the RDIF sale.

In addition, FmHA was required to prepay Certificates of Beneficial Ownership (CBOs) held by the Federal Financing Bank (FFB) to sell the loans backing those CBOs to the public. In order to effect the repurchase, FmHA was required to pay to the FFB a prepayment penalty of $28,286,073 to repurchase RDIF CBOs. This amount is included in the reimbursement for loss request for fiscal year 1990. The RHIF CBOs were repurchased at a discount of $107,944,796.

These Congressionally mandated sales were implemented for two reasons: to provide offsetting collections to achieve deficit reduction in the year of the sale and, more importantly, to achieve improvements in credit management. Both of these goals were met. The opportunity costs associated with the sales must be considered as the cost of meeting important credit management improvement policy goals.

RURAL DEVELOPMENT GRANTS & LOANS

The fiscal year 1988 Continuing Resolution provided $6.5 million for Rural Industrialization Grants and $14.0 million to recapitalize the Rural Development Loan Fund (RDLF). The law requires that these funds be made available within 6 months of the date of enactment of the Continuing Resolution.

Question: Do you expect to meet this deadline?

Answer: We are presently developing new and revising existing instructions which implement these loans and grants with a target date for final rule publication of June 22, 1988, 6 months from enactment of the continuing resolution. We have every intention of making loan and grant funds available by that date.

Question: Please provide the subcommittee with a status report on the regulations.

Answer: FmHA Instructions 1942-G, Industrial Development Grants, 1948-C, Intermediary Relending Program, and 1951-R, Rural Development Loan Servicing, are being cleared and will be published for prior rule with a 30 day comment period with a goal of final rule publication by June 22, 1988.

The Senate report on the fiscal year 1988 Appropriations bill set aside $1 million in RDLF funds for use by Rural Community Assistance Programs for repair of small systems.

Question: What steps have been taken to implement this report language?

Answer: The Agency will include intermediary loans to regional Rural Community Assistance Programs for the purpose of assisting rural communities with small scale water problems as an eligible purpose under its RDLF lending authorities.

RURAL HOUSING

Question: The Administration's budget request proposes termination of the current rural housing loan program and, in its place, 27,500 vouchers for low-income people. The '87 Housing Act authorized a voucher demonstration of 7,500 units a year for fiscal year '88 and '89.

Has the Administration submitted legislation to authorize the remaining 20,000 vouchers? If so, what action has the Banking Committee taken on this legislation? If not, how can you expect this Committee to act on the President's request?

Answer: We have submitted legislation to the Banking Committee to revise section 8(o) of the Housing Act of 1937 to enable the voucher program to serve existing low-income tenants in our rural rental housing section 515 projects in the absence of Title V housing authorities for rental assistance. Our opinion is that, after such amendment, we would have sufficient authority to operate a voucher program as submitted.

The Banking Committee to date has authorized only a voucher demonstration under the Housing and Community Development Act of 1987, utilizing a percentage of funds from the section 502 and section 515 loan authorizations. However, without a direct appropriation of funds or appropriation language directing (or authorizing) a transfer, the Agency is unable to implement the voucher demonstration program. Also, a direct appropriation for the full voucher program as requested would be required.

Without the requisite Appropriation Committee action the Agency will not be able to implement the housing voucher demonstration program enacted by Congress and envisioned in the President's Budget.

Question: The '87 Housing Act Established a program to preserve certain rural rental housing projects financed under section 515. What steps has FmHA taken to implement these provisions?

Answer: A regulation has been published as an interim rule on April 22, 1988 implementing these provisions of the Housing and Community Development Act of 1987. The regulation will be effective 30 days after publication. With the interim rule, we have asked for comments and plan to republish the rule within the next year as a Final Rule. Our Finance Office has been advised to develop the software necessary to handle the new loan types and debt forgiveness required by this legislation.

Question: Will FmHA need specific appropriation language to implement any of the provisions of the preservation section? If so, please provide the subcommittee with appropriate legislative language.

Answer: The equity loan portion, section 502(c)(4) of the new legislation, will be funded from regular section 515 loan allocations. However, the loans to the non-profits, section 502(c)(5)(C) and debt forgiveness section 502(c)(5)(D), each need to be provided in appropriation acts in order to be implemented. Since FmHA's position is to support the President's request for rural housing assistance to be only in the form of housing vouchers, we are not requesting any appropriation language to fund these initiatives.

INTEREST RATE REDUCTION PROGRAM

The interest rate reduction program for farm loans helps lenders continue to provide credit to family farmers who are temporarily unable to project a positive cash flow on all income and expenses, including debt service, without a reduction in the interest rate.

Under the Food Security Act, the program was authorized funds not to exceed $490 million and was made effective until September 30, 1988. The Agricultural Credit Act of 1987 extended the program another 5 years.

Question: Why has this program not been utilized to a greater degree?

Answer: This program is totally dependent on lender participation. Some lenders have indicated that financially, they cannot absorb the cost of writing down the interest rate even when the government is picking up 2 percent of the writedown. However, we find that this program has grown over the past several years as lenders, in general, are becoming more aware of the benefits of the program in assisting farmers who have been valuable customers, but lack financial resources to repay the loan due to interest cost.

Question: How much success does FmHA anticipate in using this program to help FmHA qualified borrowers purchase farmland held in inventory by the Farm Credit System under the Demonstration Project outlined in Section 613 of the Agricultural Credit Act of 1987?

Answer: We anticipate the participation in the demonstration project program in conjunction with the interest rate buy down program to be very good. With the need for Farm Credit System to move inventory properties and generate a return on investment coupled with the past shortages of long term financing available for FmHA applicants, the demand for this alternative way to purchase family-size farms should be very attractive to tenant farmers.

Question: What is the source of funds for this program?

Answer: Funds for the interest rate buydown program are provided through the Agricultural Credit Insurance Fund (ACIF). The fund is reimbursed for the cost of this program as part of the reimbursement for losses appropriations.

Question: How much money has been used to date for each year of the program's existence?

Answer: FmHA obligated approximately $9.5 million for this program in fiscal year 1986, $21.9 million in fiscal year 1987, and $6.5 million since the beginning of fiscal year 1988.

LOAN MANAGEMENT

Question: Is Farmers Home continuing to take adverse actions on loans before the final regulations are issued to implement the credit act? If so, what instructions have been given to employees out in the field concerning foreclosures and the restructuring of loans?

Answer: No, Farmers Home Administration is not taking adverse action on loans prior to the issuance of final regulations implementing the Agricultural Credit Act of 1987. In fact, all field offices were notified June 18, 1987 and January 6, 1988, that no farmer program loans would be accelerated, foreclosed, or liquidated until final regulations are issued to carry out the intent of the Act. Also, all farmer program borrowers whose Farmers Home Administration loan accounts were accelerated between November 1, 1985, and May 7, 1987, who have not been foreclosed on or liquidated, have been provided notice that they are entitled to apply for debt restructuring consistent with avoiding losses on their loans and ensuring that they are able to continue farming. They are also entitled to the release of security income of up to $18,000, from the sale of normal farm income security, for a period of twelve months, to pay essential farm operating and family living expenses.

Mr. Clark, for the past several years, Congress and Farmers Home have been engaged in a tug-of-war over what many have seen as reluctance on the part of Farmers Home to carry out its mandate to serve its borrowers. Recently, I have seen press reports that Farmers Home intends to comply with the intent of Congress in implementing the Credit Act and that the Agency intends to avoid battles with Congress over implementation of the Act.

Question: Could this really be true, or is this just a little public relations ploy?

Answer: Farmers Home Administration fully intends to comply with the letter as well as the spirit of the law. However, many Farmers Home Administration borrowers have large debts with other creditors and even with Farmers Home Administration debts written down to net recovery value, will not be able to project feasible plans of operations. We will be working with other creditors to assist farmers to stay in business.

FARM OWNERSHIP LOAN PROGRAM

The Farm Ownership Loan Program has been a subject of debate over the past few years. The Administration has pushed for cutting it back and eventually eliminating it, but the Congress has not agreed and continues to authorize the program. Much of the controversy centers on whether the Federal government should be a source of long-term real estate financing or should it devote its limited resources to shorter-term operating credit.

Question: What has been the demand for both direct and guaranteed credit in terms of number and dollar amount of loan applications made, approved, and pending because of lack of funding availability for each of the past 3 years?

Answer: In fiscal year 1986, 4,032 direct and 1,265 guaranteed farm ownership loans were obligated for $371 million and $192 million respectively. In fiscal year 1987, 896 direct and 2,137 guaranteed farm ownership loans were obligated for $75 million and $324 million respectively. In fiscal year 1988, through April 13, 786 direct and 1,412 guaranteed farm ownership loans were obligated in the amounts of $69 million and $207 million, respectively.

Statistical data is not available as to the number of applications nationally which are being held because of lack of funds.

Question: What has been the impact on real estate financing for beginning farmers of the level of direct and guaranteed farm ownership lending levels over the past 3 years? In other words, have large numbers of beginning farmers been denied the opportunity to purchase farms because of the level of farm ownership lending?

Answer: The Farmers Home Administration does not capture data indicating the number of insured and guaranteed loans made to beginning farmers each year. However, Farmers Home Aministration intends to continue in its role as the lender of last resort when funding cannot be obtained elsewhere and the family-size operation shows a reasonable chance for success.

Farmers Home Administration has been a leading force in spreading the outreach of nongovernmental lending institutions into rural sectors to assist existing, previous and first-time farmers obtain farm ownership credit. Farmers Home Administration will continue to serve as a temporary source of supervised credit and technical support through its guaranteed farm ownership program, which will enable rural Americans to continue and improve their farming enterprises, until they are able to qualify for private sector financing. Beginning farmers with limited resources need to realize the highest returns on their investments and establish a sound financial base to assure success in their operations. Historically, land can be leased at a lesser cost than ownership. To assist beginning farmers in getting established in agriculture, we are maximizing our efforts in providing needed operating credit where maximum returns are realized.

Question: Will the secondary market provisions of the Agricultural Credit Act of 1987 increase credit availability for long-term farm real estate loans?

Answer: A principal product of secondary markets generally is to encourage the flow of capital from credit abundant areas to areas where credit is scarce. Both the Farmers Home Administration secondary market and the agricultural mortgage secondary market established by Title VIII, Subtitle A should facilitate such a flow of capital. In the Farmers Home Administration secondary market pool assemblers will be allowed to accumulate Farmers Home Administration's guaranteed farm loans into pools, and then sell certificates backed by those pools. This pooling provision will make FmHA's secondary market more attractive to institutional investors, and will facilitate the flow of capital from capital rich financial centers into rural areas. We expect that the bulk of pooling activity will involve long term real estate loans.

Question: Could such an increase, if any, of credit availability due to a new secondary market be a basis to further curtail or eliminate FmHA's direct and/or guaranteed farm ownership loan program?

Answer: The secondary market to be established by the Agricultural Credit Act of 1987 should mitigate inefficiencies that may exist in capital markets, and increase the access to credit for farmers, rural businesses and residents. However, this increased capital access may not reach those farmers who are unable to get credit elsewhere, and are therefore eligible for Farmers Home Administration's direct or guaranteed loans.

ASSET SALES

As part of the 1986 Budget Reconciliation Act, the FmHA is required to sell Community Facility Loans sufficient to yield net proceeds of $588 million in 1988. The President's Budget increased this figure to $861 million. As part of the effort to reach this goal, FmHA has implemented a Discount Purchase Program.

Question: Please provide the subcommittee with a full description of this program and please explain why borrowers wishing to purchase their loan after May 6, 1988, are required to post a 5 percent deposit.

Answer: A copy of FmHA's letter to community program borrowers describing this year's Discount Purchase Program will follow in the record. Unlike last year, Farmers Home is looking to the Discount Purchase Program as the primary source of receipts from loan sales to meet the Congressional targets and deadlines. The purpose of the Good Faith Deposit deadline is to provide us with enough information as soon as possible on how much we can expect to receive from borrower buybacks. Based on that information, we can then determine approximately how much, if any, additional loans will need to be sold to the public (on a securitized basis) to ensure that we meet our receipt targets for the year.

[The information follows:]

LETTER FROM VANCE L. CLARK, ADMINISTRATOR, FARMERS HOME ADMINISTRATION

Dear Community Program Borrower: MAR 14 1988

In October 1986, President Reagan signed into law the Omnibus Budget Reconciliation Act of 1986 (OBRA) and the Continuing Appropriations Act of 1987. Among the provisions of these laws is a requirement that specific Federal agencies sell certain assets. One of the agencies affected was Farmers Home Administration (FmHA).

Last year FmHA was required to sell enough Community Program loans to realize $1.025 billion by September 30, 1987. These laws also required FmHA to sell enough Community Program loans to realize net proceeds of $588 million by September 30, 1988, and $584 million by September 30, 1989. The President's budget, recently released, increased the net proceeds target to $861 million in Fiscal Year 1988.

During 1987, FmHA met its sales requirements through two programs: the discount purchase program which permitted many borrowers to purchase their own loans at a discount and the "securitized sale" in which FmHA sold a package of loans to the Community Program Loan Trust 1987 A (Trust). FmHA intends to follow a similar approach for Fiscal Year 1988.

Recently, OBRA was amended by the Agricultural Credit Act of 1987 (ACA) to provide Community Program borrowers the right to purchase their loan(s) on potentially favorable terms (as detailed below) before such loan(s) may be sold to other parties. Consequently, FmHA is conducting a new Discount Purchase Program which offers Community Program Borrowers, the opportunity to purchase the FmHA loans at a discounted price (subject to certain conditions and restrictions set forth in the Fact Sheet, Attachment I).

Only Community Facility and Water and Waste Disposal loans are eligible for this program. Loans on which borrowers have been sent a letter dated on or before March 7, 1988, asking them to refinance (graduate), MAY NOT be purchased at a discount.

Based on ACA, the new Discount Purchase Program contains the following general provisions:

1. Tax-exempt financing is permitted. If tax-exempt financing is used, the price will be determined using a discount based on the Schedule of Certified Interest Rates for March through June 1988, as published monthly by the Secretary of the Treasury.

2. If financing other than tax-exempt is used or if the borrower uses its own non-tax-exempt funds with no future tax-exempt financing, the price will be determined using a discount based on the most recent sale of loans to the Trust, adjusted for changes in market interest rates (using the Schedule of Certified Interest Rates for March through June 1988 as published by the Secretary of the Treasury), servicing and sales expenses, and the maturity and interest rate of the note.

3. If a borrower has more than one FmHA loan outstanding, the borrower is not obligated to purchase all of its loans to participate in the Discount Purchase Program. A borrower may purchase one, several, or all of its loans, at its discretion. A loan may be purchased at a discount only if it has been closed and fully disbursed according to the Finance Office records by March 4, 1988.

4. If a loan is delinquent, the delinquent amount must be paid at par at the time the loan is purchased.

The attached Discount Purchase Program Fact Sheet provides more specific information about this program.

Potential advantages of participating in the Discount Purchase Program include:

1. Buying your loans at a discounted price may result in saving your community money. Normally, FmHA only permits redemption of loans at the full outstanding amount (par).

2. You will avoid the future possibility of FmHA requiring you to refinance (graduate) your loans at par.

3. Purchase of your loans will free you of certain financial and audit reporting requirements contained in the loan documents.

4. Monies that relate strictly to the loans being purchased that you may already have in escrow or reserve funds may be used to purchase your loans. For example, if you have any funds in low-yielding accounts and investments, these funds could be used to retire your loans at a potentially favorable price.

5. Purchase of loans does not preclude you from obtaining future loans from FmHA, providing you meet FmHA eligibility requirements.

While the potential benefits may be significant, you are urged to undertake a careful financial and programmatic analysis before deciding to prepay. For some borrowers, purchase MAY NOT be beneficial. Depending on the terms of your particular loan(s), the terms of any new financing required and the transaction costs may outweigh the savings from the discount. Therefore, we strongly encourage any borrower considering a purchase to consult with its financial advisors before proceeding.

A new method of calculating the discounted purchase price has been devised for this year's program which simplifies the process by using Pricing Grids and eliminating Debt Service Schedules and Proof of Pricing Reports used in last year's program. Besides the numerous advantages described above, this new method provides borrowers with the following additional advantages:

1. The process of obtaining financing is facilitated because a firm price at any point in time is available. Borrowers will not have to wait for an analysis of cash flows for each loan.

2. The new method allows closings to occur immediately, at the borrower's option, if the borrower believes that it is advantageous to do so.

The Pricing Grids are based on a standard present value calculation using a number of uniform assumptions. Therefore, a present value calculation of the cash flow of your particular loan may vary from the price offered by FmHA if the characteristics of your loan are different from the assumptions used in the Pricing Grids. However, a price based on the Pricing Grids constitutes FmHA's offer and will be utilized, without exception, for all borrowers who purchase their loans at a discount in this year's program.

The Pricing Factor obtained from the appropriate Pricing Grid will allow you to calculate the correct discount for your loan and will only change during the course of the program based on monthly changes in the Treasury rates. Actual final pricing information will be provided to you through your FmHA District Office. The formulas and criteria for determining the price of your loan and the Pricing Grids are included with the attached Fact Sheet.

Note: the March 1988 Pricing Grids apply to closings through April 9, 1988. Prices at closings which occur during the remainder of this program will vary with changes in the Schedule of Certified Interest Rates, as published monthly by the Secretary of the Treasury.

To provide you with ample time to consider this offer and arrange any financing which may be necessary, the deadline for closing is on or before July 11, 1988. If you want to close before May 6, 1988, you may do so simply by contacting your District Office. If you wish to close after May 6, 1988, you have until then to submit an Indication of Interest form with a Good Faith Deposit of five percent of the outstanding principal balance for each loan you intend to purchase (as described in the Fact Sheet). IT IS YOUR RESPONSIBILITY TO ASSURE THAT THE FULL DEPOSIT IS DELIVERED TO YOUR FMHA DISTRICT OFFICE BY THIS DEADLINE. NO EXCEPTIONS WILL BE MADE.

It is not known at this point how large of a securitized sale FmHA will need to conduct this year. Among other things, it will depend on the level of interest in the Discount Purchase Program.

Community Program borrowers should be reassured that in the event a securitized sale becomes necessary and their loan is selected for sale, the legislation mandating the sale affords a number of important protections, as follows:

1. The sale of a loan does not change any of the terms or conditions of that loan except as described in number 2. below. The new holder of the loans will have no more right or recourse to the borrowers than FmHA. The new holder cannot and will not require any changes in the interest rate, payment schedule, or collateral.

2. The new holder cannot require a current borrower to refinance (graduate) its loan in the private sector (something FmHA can do if it continues to hold the loan).

3. Community Program borrowers will have essentially the same rights, privileges, and obligations after the sale. The Secretary of Agriculture is responsible for assuring that the new holder will provide servicing to ensure continued performance of the loan.

4. The sale program does not change a borrower's eligibility to borrow from FmHA in the future.

5. Every effort is being made to protect the interests of both the Community Program borrowers and the ultimate investors.

We hope that this overview of FmHA loan sale programs is helpful to you and we look forward to working with you in the future.

Sincerely,

VANCE L. CLARK
Administrator

[ATTACHMENT I]

COMMUNITY PROGRAM DISCOUNT PURCHASE PROGRAM

FACT SHEET

The Farmers Home Administration's (FmHA) Community Program Discount Purchase Program will give borrowers the opportunity to buy back their loans at a potentially attractive discount price.

ELIGIBILITY

1. Only Water and Waste Disposal and/or Community Facilities loans of the borrower may be purchased at a discount. A borrower may purchase any one or more of its eligible loans. Indebtedness evidenced by a single instrument or serial instruments of the same series are ONE LOAN and may not be purchased separately. Borrowers should contact the FmHA District Office servicing the account if assistance is needed to identify the affected accounts.

2. If a loan is delinquent, the delinquent amount must be paid at par at the time the loan is purchased.

3. Borrowers MAY NOT purchase a loan at a discount if they were asked to refinance (graduate) that loan at par in a letter dated on or before March 7, 1988.

4. Only loans which have been closed and fully disbursed according to the FmHA records by March 4, 1988, may be purchased at a discount.

HOW TO PARTICIPATE

Borrowers may choose to purchase their loan at a discount at any time through July 11, 1988, based on the formulas and criteria described below. Prices will vary each month based on changes in the Schedule of Certified Interest Rates published by the Secretary of the Treasury. These Treasury rates will be used for all closings as follows:

TREASURY RATES	CLOSING DATES
March 1988	March 10 - April 9, 1988
April 1988	April 10 - May 9, 1988
May 1988	May 10 - June 9, 1988
June 1988	June 10 - July 11, 1988

Pricing Grids based on the Schedule of Certified Interest Rates for March 1988, are included in this package. (See Attachment II) New Pricing Grids based on rates for April through June will be available at your local District Office. If interest rates decline, your discount price will be higher; if interest rates increase, your discount price will be lower.

Borrowers who want to close their discount purchase on or before May 6, 1988, may do so without making a Good Faith Deposit simply by contacting their District Office to obtain a final price and schedule a closing date. Borrowers who desire a closing date after May 6, 1988, must follow the instructions below:

1. Complete the enclosed "Indication of Interest" form (one for each loan to be purchased) and send it, along with a Good Faith Deposit of five percent of the outstanding principal balance of each of the loans you will be purchasing. This must arrive at your FmHA District Office by CLOSE OF BUSINESS, May 6, 1988. Indications of Interest and deposits not received by then will be returned to the borrower. IT IS THE BORROWER'S RESPONSIBILITY TO ASSURE THAT THE FULL DEPOSIT IS DELIVERED TO THE DISTRICT OFFICE BY THE DEADLINE. NO EXCEPTIONS WILL BE MADE TO THIS REQUIREMENT.

2. Discount Purchase Program closings may be scheduled for any date mutually agreed to by the borrower and the District Office but all closings must occur on or before July 11, 1988. Borrowers may contact their District Office to obtain a final purchase price.

3. If you fail to close by July 11, 1988, your Good Faith Deposit will be processed as an "extra" loan payment and applied to the FINAL loan installment(s), unless the FmHA servicing official determines that it should be applied as a regular payment. The full amount of the next regular payment will still be due.

4. Funded reserves in the amount specified by the loan security instruments MAY NOT be used for the good faith deposit. Any other available funding source, including any amount of reserves in excess of those currently required in the security instruments, may be used for the Good Faith Deposit. Reserves strictly related to the loan being purchased MAY be used toward the final payoff amount at closing.

5. At closing, you will be required to sign a Borrower Final Price Acceptance Form indicating your acceptance of the price. (See Attachment IV)

RESTRICTIONS

1. Loans will only be sold directly to Borrowers and any loan purchased at a discount will be stamped "Satisfied in Full" upon receipt of the final payment. Loans will not be sold to third parties under this program. Bonds, notes, or other obligations to FmHA will not be assigned to third parties.

2. It is recognized that a borrower may use a combination of existing funds and newly incurred debt, either tax-exempt debt or other debt, to purchase a single loan. If any combination of tax-exempt funds and non-tax-exempt funds are used to purchase a single loan, the loan will be priced on the basis of the tax-exempt formula.

USE OF EXISTING FUNDS

Borrowers with bond escrow accounts, such as reserve, extension and improvement, redemption and others, that are strictly related to the loan being purchased, may use those funds to purchase the loan. Only funds in excess of the current reserve requirements may be used for the good faith deposit. If a borrower purchases only some of its loans, it MAY NOT use reserves required for the loans not purchased.

NEED FOR ADDITIONAL FUNDS

Your purchase may be financed 1) with tax-exempt funds using a discount based on the Schedule of Certified Interest Rates for March through June 1988, as published by the Secretary of the Treasury, or 2) when using funds other than tax-exempt, including existing non-tax-exempt funds, the discount is based on the yield to FmHA from last year's securitized sale of loans, adjusted for changes in market interest rates, servicing and sales expenses, and the maturity and interest rate of the note. To determine which method would be better, you should consult with your financial advisor.

OTHER THAN TAX-EXEMPT FINANCING

Because this method of financing results in a higher discount to borrowers and lower price to FmHA, FmHA will require all borrowers opting to finance the purchase with their own existing non-tax-exempt funds, or with new debt which is non-tax-exempt, to agree never to replace those funds with tax-exempt financing.

USING THE PRICING GRIDS

The attached Pricing Grids may be used to calculate the discount at which you can purchase your loan from FmHA. If you have more than one eligible loan, the price of each eligible loan must be calculated separately, based on the type of financing selected, payment frequency, and the interest rate and date of final maturity.

The Pricing Factor obtained from the appropriate Pricing Grid will allow you to calculate the correct discount for your loan(s) and will only change during the course of the program based on monthly changes in the Treasury rates. The Pricing Grids will change monthly based on changes in Treasury rates. The Pricing Grids included with this Fact Sheet use the March 1988 Treasury rates and are provided for the purpose of estimating your discount. The March 1988 rates are the actual rates for purchases closing on or before April 9, 1988. Final Prices must be obtained by contacting your District Office when you are ready to purchase your loan.

Which Pricing Grid you use will depend on the method of financing you choose (tax-exempt or non-tax-exempt) and the payment frequency (annual or other than annual) required by the debt instrument as follows:

	PAYMENT FREQUENCY	
	ANNUAL	OTHER
TYPE OF FINANCING		
TAX-EXEMPT	USE GRID IIa	USE GRID IIb
NON-TAX-EXEMPT	USE GRID IIc	USE GRID IId

The amount of the discount, if any, will depend upon several factors including the method of financing, interest rate and maturity shown on the debt instrument, fluctuations in Treasury rates, etc. The amount of the discount is equal to 1.00 minus the Pricing Factor decimal shown on the applicable Pricing Grid. WE STRONGLY SUGGEST YOU CONSULT WITH A QUALIFIED FINANCIAL ADVISOR TO DETERMINE THE POTENTIAL IMPACT PARTICIPATING IN THIS PROGRAM MAY HAVE.

DETERMINING THE FINAL PRICE

1. Take the Unpaid Principal Balance as of the last payment;

2. Subtract any Delinquent Amount;

3. Find the Pricing Factor in the applicable Pricing Grid based on the Interest Rate (as shown on the debt instrument, except in cases where an Administrative Adjustment to the interest rate in accordance with FmHA Instruction 1951-E, Section 1951.221, has occurred) and the Final Maturity (for Principal plus Interest loans it is the last scheduled payment that remains unpaid and for Amortized loans it is the last regular payment date on or before the final anniversary date of the loan). Because the Final Maturities and Interest Rates on the Pricing Grids are divided into intervals, the Final Maturity and/or Interest Rate of your loan may not be exactly the same as those shown on the Grids. If so, for Final Maturity choose the later date of the interval into which your Final Maturity actually falls (e.g., since the intervals are April 1 through October 1, if your Maturity is December 1, 2010, choose April 1, 2011, from the Pricing Grid). If your Interest Rate is different from the Grid, round it to the nearest interest rate interval shown on the Grid.

4. Multiply the Pricing Factor times the Unpaid Balance to find the Discounted Amount;

5. Add the Accrued Interest from the last payment through the date of closing to the Discounted Amount;

6. Subtract any Prepaid Interest;

7. Add any Delinquent Amount at par;

8. Equals the Final Price.

Attachment IV is the Borrower Final Price Acceptance Form the District Office will use to develop the final price.

EXAMPLE: Assume you have a 40 year amortized loan made originally for $1,000,000 on December 12, 1970, maturing on December 12, 2010, with regular annual payments from January 1, 1971 through January 1, 2010, an interest rate of 5% and that now has an unpaid balance of $570,513. The Final Maturity to choose from the Grid is April 1, 2010. You choose to use other than tax-exempt financing to purchase your loan. Read down the year of maturity column on the March 1988 Pricing Grid IIc to 4/1/2010, then read across to the 5.000 interest rate column. The number at this intersection is .61756. Multiply .61756 by the unpaid balance ($570,513) to determine the Discounted Amount. If there is no delinquent amount, accrued interest, or prepaid interest, the Final Price for your loan would be $352,326 ($570,513 x .61756).

SHOULD YOU PURCHASE?

Generally, it will benefit a borrower to purchase its loan(s) if the total costs of the refinancing, including the new debt service, are less than the costs associated with the original loan.

Savings or losses associated with the purchase will depend on several factors, including the purchase discount rate (which will depend on the method of financing, tax-exempt or other than tax-exempt, selected by the borrower and market interest rates at the time of purchase), the total costs of raising the funds to purchase the loan and the terms of any new debt required. There may be situations where the refinancing may be for a shorter maturity period or a higher interest rate that will increase debt service payments, possibly resulting in a rate of fee increase for your users.

In order to determine whether it is in your best interest to purchase your loan(s), we strongly urge you to consult with a qualified financial advisor.

INQUIRIES

If you have questions concerning any aspect of the loan purchase program, please call the following toll-free numbers for assistance, between 8:30 a.m. and 4:30 p.m. (Central Time):

All borrowers, except those in Missouri, call: (800) 325-7164
Borrowers in Missouri call: (800) 392-7209

This service will be available through May 6, 1988.

[ATTACHMENT II]

FARMERS HOME ADMINISTRATION 1988 DISCOUNT PURCHASE PROGRAM
Purchase Price of Community Program Loans
For borrowers using TAX EXEMPT sources of financing and paying interest ANNUALLY
Closing on or after MAY 10, 1988 but not after JUNE 9, 1988

Maturing on or Before			3.500	3.625	3.750	3.875	4.000	4.125	4.250	4.375	4.500	4.625	4.750	4.875	5.000	5.125	5.250	5.375
10	1	1988	0.99633	0.99649	0.99666	0.99683	0.99699	0.99716	0.99733	0.99749	0.99766	0.99783	0.99799	0.99816	0.99833	0.99849	0.99866	0.99883
4	1	1989	0.98007	0.98082	0.98157	0.98232	0.98307	0.98382	0.98457	0.98532	0.98607	0.98682	0.98757	0.98833	0.98908	0.98983	0.99058	0.99133
10	1	1989	0.97789	0.97863	0.97937	0.98012	0.98086	0.98161	0.98236	0.98310	0.98385	0.98460	0.98535	0.98610	0.98685	0.98760	0.98835	0.98910
4	1	1990	0.95735	0.95865	0.95995	0.96125	0.96255	0.96335	0.96515	0.96646	0.96776	0.96907	0.97037	0.97168	0.97299	0.97429	0.97560	0.97691
10	1	1990	0.95621	0.95749	0.95878	0.96006	0.96135	0.96264	0.96393	0.96523	0.96652	0.96782	0.96912	0.97042	0.97172	0.97303	0.97433	0.97564
4	1	1991	0.93624	0.93806	0.93988	0.94170	0.94353	0.94535	0.94718	0.94901	0.95084	0.95267	0.95450	0.95634	0.95818	0.96002	0.96186	0.96370
10	1	1991	0.93465	0.93644	0.93823	0.94003	0.94183	0.94363	0.94544	0.94725	0.94907	0.95038	0.95271	0.95453	0.95636	0.95819	0.96002	0.96186
4	1	1992	0.91388	0.91618	0.91848	0.92079	0.92310	0.92542	0.92774	0.93006	0.93238	0.93471	0.93704	0.93938	0.94171	0.94405	0.94640	0.94874
10	1	1992	0.91188	0.91415	0.91642	0.91869	0.92097	0.92325	0.92554	0.92784	0.93014	0.93244	0.93475	0.93706	0.93938	0.94171	0.94404	0.94637
4	1	1993	0.89316	0.89592	0.89868	0.90145	0.90423	0.90701	0.90979	0.91258	0.91538	0.91818	0.92098	0.92379	0.92660	0.92942	0.93224	0.93507
10	1	1993	0.89079	0.89350	0.89622	0.89895	0.90168	0.90442	0.90716	0.90992	0.91268	0.91545	0.91822	0.92100	0.92379	0.92658	0.92939	0.93219
4	1	1994	0.86926	0.87243	0.87562	0.87880	0.88200	0.88520	0.88841	0.89163	0.89485	0.89808	0.90132	0.90456	0.90781	0.91107	0.91433	0.91760
10	1	1994	0.86965	0.87277	0.87591	0.87906	0.88222	0.88538	0.88856	0.89174	0.89493	0.89813	0.90135	0.90457	0.90780	0.91103	0.91428	0.91754
4	1	1995	0.84807	0.85164	0.85522	0.85881	0.86241	0.86601	0.86963	0.87325	0.87689	0.88053	0.88418	0.88784	0.89150	0.89518	0.89886	0.90256
10	1	1995	0.84514	0.84864	0.85215	0.85567	0.85921	0.86275	0.86631	0.86988	0.87346	0.87705	0.88065	0.88426	0.88789	0.89152	0.89517	0.89883
4	1	1996	0.82696	0.83090	0.83485	0.83881	0.84278	0.84676	0.85075	0.85476	0.85877	0.86280	0.86683	0.87088	0.87494	0.87901	0.88309	0.88718
10	1	1996	0.82748	0.83135	0.83524	0.83915	0.84306	0.84700	0.85094	0.85490	0.85888	0.86286	0.86686	0.87088	0.87491	0.87895	0.88301	0.88708
4	1	1997	0.80600	0.81027	0.81456	0.81887	0.82318	0.82751	0.83195	0.83621	0.84058	0.84496	0.84936	0.85377	0.85819	0.86262	0.86707	0.87153
10	1	1997	0.80658	0.81079	0.81501	0.81925	0.82351	0.82778	0.83207	0.83638	0.84070	0.84504	0.84940	0.85377	0.85816	0.86256	0.86698	0.87142
4	1	1998	0.78949	0.79411	0.79874	0.80338	0.80804	0.81272	0.81741	0.82212	0.82685	0.83159	0.83635	0.84112	0.84591	0.85071	0.85553	0.86036
10	1	1998	0.79010	0.79464	0.79920	0.80378	0.80838	0.81300	0.81763	0.82229	0.82697	0.83166	0.83638	0.84111	0.84586	0.85063	0.85542	0.86023
4	1	1999	0.77369	0.77863	0.78358	0.78855	0.79354	0.79855	0.80357	0.80862	0.81368	0.81876	0.82386	0.82898	0.83412	0.83927	0.84444	0.84964
10	1	1999	0.77432	0.77918	0.78406	0.78896	0.79388	0.79883	0.80379	0.80878	0.81380	0.81883	0.82388	0.82896	0.83406	0.83918	0.84432	0.84949
4	1	2000	0.75857	0.76381	0.76906	0.77434	0.77964	0.78496	0.79031	0.79567	0.80105	0.80646	0.81189	0.81733	0.82280	0.82829	0.83380	0.83933
10	1	2000	0.75922	0.76438	0.76956	0.77476	0.77999	0.78525	0.79053	0.79583	0.80116	0.80652	0.81190	0.81731	0.82273	0.82819	0.83367	0.83917
4	1	2001	0.74409	0.74961	0.75516	0.76073	0.76633	0.77194	0.77759	0.78326	0.78895	0.79466	0.80040	0.80616	0.81195	0.81776	0.82359	0.82944
10	1	2001	0.74476	0.75020	0.75566	0.76116	0.76668	0.77223	0.77781	0.78342	0.78905	0.79472	0.80041	0.80612	0.81187	0.81764	0.82344	0.82927
4	1	2002	0.73023	0.73602	0.74184	0.74769	0.75357	0.75947	0.76540	0.77135	0.77734	0.78334	0.78938	0.79544	0.80153	0.80764	0.81378	0.81995
10	1	2002	0.73091	0.73662	0.74235	0.74813	0.75393	0.75976	0.76562	0.77152	0.77744	0.78340	0.78938	0.79540	0.80144	0.80752	0.81363	0.81976
4	1	2003	0.71695	0.72300	0.72908	0.73520	0.74134	0.74751	0.75371	0.75994	0.76620	0.77249	0.77881	0.78516	0.79154	0.79794	0.80438	0.81084
10	1	2003	0.71239	0.71830	0.72425	0.73023	0.73625	0.74230	0.74838	0.75450	0.76065	0.76683	0.77305	0.77930	0.78558	0.79189	0.79824	0.80462
4	1	2004	0.69877	0.70502	0.71129	0.71760	0.72395	0.73032	0.73673	0.74317	0.74965	0.75615	0.76269	0.76925	0.77585	0.78248	0.78914	0.79583
10	1	2004	0.69953	0.70568	0.71187	0.71810	0.72436	0.73066	0.73700	0.74337	0.74978	0.75623	0.76271	0.76923	0.77578	0.78237	0.78899	0.79565
4	1	2005	0.68645	0.69292	0.69943	0.70598	0.71256	0.71918	0.72583	0.73251	0.73923	0.74599	0.75278	0.75960	0.76646	0.77335	0.78028	0.78724
10	1	2005	0.68722	0.69360	0.70002	0.70648	0.71298	0.71952	0.72609	0.73271	0.73937	0.74607	0.75280	0.75957	0.76639	0.77324	0.78012	0.78705
4	1	2006	0.67465	0.68134	0.68808	0.69484	0.70165	0.70850	0.71538	0.72230	0.72926	0.73625	0.74329	0.75036	0.75746	0.76461	0.77178	0.77900

Maturing on or Before	3.500	3.625	3.750	3.875	4.000	4.125	4.250	4.375	4.500	4.625	4.750	4.875	5.000	5.125	5.250	5.375
10 1 2006	0.67543	0.68292	0.68866	0.69535	0.70207	0.70884	0.71565	0.72250	0.72939	0.73633	0.74331	0.75032	0.75738	0.76448	0.77162	0.77880
4 1 2007	0.66336	0.67026	0.67720	0.68418	0.69120	0.69827	0.70537	0.71252	0.71970	0.72693	0.73419	0.74149	0.74884	0.75622	0.76364	0.77110
10 1 2007	0.66414	0.67094	0.67779	0.68468	0.69162	0.69861	0.70564	0.71272	0.71984	0.72700	0.73421	0.74146	0.74876	0.75610	0.76348	0.77090
4 1 2008	0.65254	0.65964	0.66678	0.67397	0.68120	0.68847	0.69578	0.70314	0.71054	0.71799	0.72547	0.73300	0.74057	0.74818	0.75584	0.76353
10 1 2008	0.65333	0.66033	0.66738	0.67447	0.68162	0.68881	0.69605	0.70334	0.71068	0.71806	0.72549	0.73297	0.74049	0.74806	0.75567	0.76333
4 1 2009	0.64219	0.64947	0.65680	0.66418	0.67161	0.67908	0.68660	0.69416	0.70177	0.70942	0.71712	0.72487	0.73265	0.74049	0.74836	0.75628
10 1 2009	0.64298	0.65016	0.65740	0.66469	0.67203	0.67942	0.68687	0.69436	0.70190	0.70950	0.71714	0.72483	0.73257	0.74036	0.74820	0.75608
4 1 2010	0.63227	0.63973	0.64725	0.65481	0.66242	0.67008	0.67780	0.68556	0.69336	0.70122	0.70912	0.71707	0.72507	0.73311	0.74120	0.74933
10 1 2010	0.63306	0.64042	0.64784	0.65532	0.66285	0.67043	0.67806	0.68575	0.69350	0.70129	0.70914	0.71703	0.72498	0.73298	0.74103	0.74913
4 1 2011	0.62276	0.63040	0.63809	0.64583	0.65362	0.66147	0.66936	0.67731	0.68531	0.69336	0.70145	0.70960	0.71780	0.72604	0.73433	0.74268
10 1 2011	0.62356	0.63109	0.63869	0.64634	0.65405	0.66181	0.66963	0.67751	0.68544	0.69343	0.70147	0.70957	0.71772	0.72592	0.73417	0.74248
4 1 2012	0.61366	0.62146	0.62932	0.63723	0.64519	0.65321	0.66129	0.66941	0.67759	0.68582	0.69411	0.70245	0.71083	0.71927	0.72776	0.73630
10 1 2012	0.60833	0.61595	0.62362	0.63136	0.63916	0.64701	0.65492	0.66289	0.67092	0.67901	0.68715	0.69534	0.70360	0.71190	0.72026	0.72868
4 1 2013	0.59870	0.60658	0.61451	0.62250	0.63054	0.63864	0.64680	0.65501	0.66327	0.67159	0.67997	0.68840	0.69688	0.70541	0.71400	0.72263
10 1 2013	0.59955	0.60732	0.61515	0.62305	0.63101	0.63903	0.64711	0.65525	0.66345	0.67170	0.68002	0.68840	0.69683	0.70532	0.71387	0.72247
4 1 2014	0.59030	0.59832	0.60640	0.61454	0.62274	0.63100	0.63931	0.64768	0.65612	0.66460	0.67315	0.68174	0.69040	0.69911	0.70787	0.71669
10 1 2014	0.59114	0.59906	0.60704	0.61509	0.62320	0.63138	0.63962	0.64792	0.65629	0.66471	0.67320	0.68175	0.69035	0.69902	0.70774	0.71653
4 1 2015	0.58224	0.59041	0.59863	0.60692	0.61526	0.62367	0.63214	0.64067	0.64926	0.65791	0.66661	0.67538	0.68420	0.69307	0.70201	0.71100
10 1 2015	0.58308	0.59114	0.59927	0.60747	0.61573	0.62406	0.63245	0.64091	0.64943	0.65802	0.66667	0.67538	0.68416	0.69299	0.70189	0.71084
4 1 2016	0.57453	0.58283	0.59119	0.59962	0.60811	0.61666	0.62528	0.63396	0.64270	0.65150	0.66036	0.66928	0.67826	0.68730	0.69640	0.70555
10 1 2016	0.57536	0.58356	0.59182	0.60016	0.60857	0.61704	0.62559	0.63419	0.64287	0.65161	0.66042	0.66929	0.67822	0.68722	0.69628	0.70540
4 1 2017	0.56713	0.57556	0.58406	0.59262	0.60125	0.60995	0.61870	0.62753	0.63641	0.64536	0.65438	0.66345	0.67258	0.68178	0.69103	0.70034
10 1 2017	0.56796	0.57629	0.58469	0.59316	0.60171	0.61032	0.61901	0.62776	0.63659	0.64548	0.65444	0.66346	0.67255	0.68170	0.69092	0.70020
4 1 2018	0.56005	0.56860	0.57723	0.58592	0.59468	0.60351	0.61241	0.62137	0.63040	0.63949	0.64865	0.65787	0.66715	0.67649	0.68590	0.69537
10 1 2018	0.56087	0.56932	0.57785	0.58646	0.59514	0.60389	0.61271	0.62161	0.63057	0.63961	0.64871	0.65788	0.66712	0.67642	0.68579	0.69523
4 1 2019	0.55326	0.56194	0.57068	0.57950	0.58839	0.59735	0.60638	0.61547	0.62464	0.63387	0.64316	0.65252	0.66195	0.67144	0.68099	0.69060
10 1 2019	0.55407	0.56265	0.57130	0.58004	0.58884	0.59772	0.60668	0.61571	0.62481	0.63398	0.64323	0.65254	0.66192	0.67137	0.68089	0.69047
4 1 2020	0.54675	0.55555	0.56441	0.57335	0.58236	0.59145	0.60060	0.60983	0.61912	0.62849	0.63792	0.64741	0.65698	0.66660	0.67630	0.68605
10 1 2020	0.54756	0.55625	0.56503	0.57388	0.58281	0.59182	0.60090	0.61006	0.61930	0.62860	0.63798	0.64743	0.65695	0.66654	0.67620	0.68593
4 1 2021	0.54051	0.54942	0.55840	0.56746	0.57659	0.58579	0.59507	0.60442	0.61384	0.62333	0.63289	0.64252	0.65222	0.66198	0.67181	0.68170
10 1 2021	0.54131	0.55012	0.55901	0.56798	0.57703	0.58616	0.59537	0.60466	0.61402	0.62345	0.63296	0.64255	0.65220	0.66193	0.67172	0.68159
4 1 2022	0.53453	0.54355	0.55264	0.56181	0.57106	0.58038	0.58977	0.59924	0.60879	0.61840	0.62809	0.63784	0.64767	0.65756	0.66752	0.67754
10 1 2022	0.53532	0.54424	0.55324	0.56233	0.57149	0.58074	0.59007	0.59948	0.60896	0.61852	0.62816	0.63787	0.64765	0.65751	0.66744	0.67743
4 1 2023	0.52880	0.53792	0.54712	0.55640	0.56575	0.57519	0.58470	0.59429	0.60395	0.61368	0.62349	0.63337	0.64331	0.65333	0.66341	0.67356
10 1 2023	0.52957	0.53860	0.54771	0.55691	0.56619	0.57555	0.58500	0.59452	0.60412	0.61381	0.62356	0.63340	0.64331	0.65329	0.66334	0.67347
4 1 2024	0.52329	0.53252	0.54182	0.55121	0.56067	0.57022	0.57984	0.58954	0.59931	0.60916	0.61909	0.62908	0.63915	0.64929	0.65949	0.66977
10 1 2024	0.52406	0.53319	0.54241	0.55171	0.56110	0.57058	0.58013	0.58977	0.59949	0.60929	0.61917	0.62912	0.63915	0.64925	0.65943	0.66968
4 1 2025	0.51802	0.52734	0.53674	0.54623	0.55580	0.56545	0.57518	0.58499	0.59488	0.60484	0.61488	0.62499	0.63517	0.64542	0.65574	0.66614
10 1 2025	0.51877	0.52800	0.53732	0.54673	0.55623	0.56581	0.57548	0.58522	0.59506	0.60497	0.61496	0.62503	0.63517	0.64539	0.65569	0.66606
4 1 2026	0.51296	0.52237	0.53188	0.54146	0.55114	0.56089	0.57072	0.58064	0.59063	0.60070	0.61085	0.62107	0.63136	0.64173	0.65216	0.66267
10 1 2026	0.51370	0.52303	0.53245	0.54196	0.55156	0.56124	0.57101	0.58087	0.59081	0.60083	0.61093	0.62111	0.63137	0.64170	0.65211	0.66260
4 1 2027	0.50810	0.51761	0.52721	0.53689	0.54666	0.55652	0.56645	0.57647	0.58656	0.59674	0.60699	0.61732	0.62772	0.63819	0.64874	0.65936
10 1 2027	0.50884	0.51826	0.52777	0.53738	0.54708	0.55687	0.56674	0.57670	0.58674	0.59687	0.60708	0.61737	0.62774	0.63818	0.64870	0.65929
4 1 2028	0.50344	0.51304	0.52273	0.53251	0.54238	0.55233	0.56236	0.57248	0.58267	0.59295	0.60330	0.61373	0.62424	0.63482	0.64547	0.65619

Maturing on or Before	5.500	5.625	5.750	5.875	6.000	6.125	6.250	6.375	6.500	6.625	6.750	6.875	7.000	7.125	7.250	7.375
10 1 1988	0.99899	0.99916	0.99933	0.99949	0.99966	0.99983	0.99999	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
4 1 1989	0.99208	0.99283	0.99358	0.99433	0.99508	0.99583	0.99659	0.99734	0.99809	0.99884	0.99959	1.00000	1.00000	1.00000	1.00000	1.00000
10 1 1989	0.98986	0.99061	0.99137	0.99212	0.99288	0.99364	0.99439	0.99515	0.99591	0.99667	0.99743	0.99819	0.99895	0.99971	1.00000	1.00000
4 1 1990	0.97822	0.97953	0.98084	0.98215	0.98346	0.98478	0.98609	0.98740	0.98872	0.99003	0.99135	0.99267	0.99398	0.99530	0.99662	0.99794
10 1 1990	0.97695	0.97826	0.97958	0.98089	0.98221	0.98353	0.98485	0.98617	0.98749	0.98882	0.99015	0.99148	0.99281	0.99414	0.99547	0.99681
4 1 1991	0.96554	0.96739	0.96924	0.97109	0.97294	0.97479	0.97665	0.97850	0.98036	0.98222	0.98408	0.98594	0.98781	0.98967	0.99154	0.99341
10 1 1991	0.96370	0.96554	0.96739	0.96923	0.97109	0.97294	0.97480	0.97666	0.97853	0.98040	0.98227	0.98414	0.98602	0.98790	0.98978	0.99167
4 1 1992	0.95109	0.95344	0.95580	0.95816	0.96052	0.96288	0.96525	0.96762	0.97000	0.97237	0.97475	0.97713	0.97952	0.98191	0.98430	0.98669
10 1 1992	0.94871	0.95105	0.95340	0.95575	0.95811	0.96047	0.96284	0.96521	0.96759	0.96997	0.97236	0.97475	0.97715	0.97955	0.98195	0.98436
4 1 1993	0.93790	0.94074	0.94358	0.94643	0.94928	0.95213	0.95499	0.95786	0.96073	0.96360	0.96648	0.96936	0.97225	0.97514	0.97804	0.98094
10 1 1993	0.93501	0.93783	0.94066	0.94350	0.94634	0.94919	0.95204	0.95491	0.95778	0.96065	0.96354	0.96643	0.96932	0.97222	0.97513	0.97805
4 1 1994	0.92087	0.92416	0.92744	0.93074	0.93404	0.93735	0.94066	0.94398	0.94731	0.95065	0.95399	0.95733	0.96069	0.96404	0.96741	0.97078
10 1 1994	0.92080	0.92408	0.92736	0.93065	0.93395	0.93726	0.94058	0.94391	0.94725	0.95059	0.95394	0.95731	0.96068	0.96406	0.96745	0.97084
4 1 1995	0.90626	0.90997	0.91369	0.91742	0.92115	0.92490	0.92865	0.93241	0.93618	0.93996	0.94375	0.94754	0.95134	0.95516	0.95897	0.96280
10 1 1995	0.90250	0.90618	0.90987	0.91357	0.91729	0.92101	0.92475	0.92850	0.93226	0.93603	0.93981	0.94360	0.94740	0.95121	0.95504	0.95887
4 1 1996	0.89128	0.89539	0.89952	0.90365	0.90779	0.91195	0.91611	0.92029	0.92448	0.92867	0.93288	0.93710	0.94133	0.94557	0.94981	0.95407
10 1 1996	0.89116	0.89526	0.89937	0.90350	0.90764	0.91179	0.91595	0.92013	0.92432	0.92853	0.93275	0.93698	0.94122	0.94548	0.94975	0.95404
4 1 1997	0.87601	0.88050	0.88500	0.88951	0.89404	0.89858	0.90313	0.90769	0.91227	0.91686	0.92146	0.92608	0.93071	0.93535	0.94000	0.94467
10 1 1997	0.87588	0.88035	0.88483	0.88933	0.89385	0.89838	0.90293	0.90750	0.91208	0.91668	0.92129	0.92592	0.93056	0.93522	0.93989	0.94458
4 1 1998	0.86521	0.87008	0.87496	0.87986	0.88477	0.88969	0.89464	0.89959	0.90457	0.90955	0.91455	0.91957	0.92460	0.92965	0.93471	0.93979
10 1 1998	0.86506	0.86991	0.87477	0.87965	0.88456	0.88948	0.89442	0.89937	0.90435	0.90934	0.91435	0.91938	0.92443	0.92950	0.93458	0.93968
4 1 1999	0.85484	0.86007	0.86531	0.87058	0.87586	0.88116	0.88647	0.89180	0.89715	0.90252	0.90791	0.91331	0.91873	0.92417	0.92962	0.93509
10 1 1999	0.85467	0.85988	0.86510	0.87035	0.87562	0.88091	0.88623	0.89156	0.89691	0.90229	0.90768	0.91310	0.91854	0.92399	0.92947	0.93497
4 1 2000	0.84489	0.85046	0.85605	0.86166	0.86729	0.87295	0.87862	0.88431	0.89003	0.89576	0.90151	0.90729	0.91308	0.91889	0.92472	0.93057
10 1 2000	0.84470	0.85025	0.85582	0.86142	0.86704	0.87269	0.87836	0.88405	0.88977	0.89551	0.90127	0.90706	0.91286	0.91870	0.92455	0.93043
4 1 2001	0.83532	0.84122	0.84715	0.85310	0.85907	0.86506	0.87108	0.87711	0.88318	0.88926	0.89536	0.90149	0.90764	0.91381	0.92001	0.92622
10 1 2001	0.83512	0.84100	0.84691	0.85284	0.85880	0.86479	0.87080	0.87684	0.88290	0.88899	0.89511	0.90125	0.90741	0.91361	0.91982	0.92607
4 1 2002	0.82614	0.83236	0.83860	0.84487	0.85117	0.85748	0.86383	0.87020	0.87659	0.88301	0.88945	0.89592	0.90242	0.90893	0.91547	0.92204
10 1 2002	0.82593	0.83212	0.83835	0.84460	0.85088	0.85720	0.86354	0.86991	0.87630	0.88273	0.88918	0.89567	0.90218	0.90871	0.91528	0.92187
4 1 2003	0.81733	0.82385	0.83040	0.83697	0.84358	0.85021	0.85687	0.86355	0.87027	0.87701	0.88378	0.89057	0.89739	0.90424	0.91112	0.91802
10 1 2003	0.81103	0.81748	0.82395	0.83046	0.83700	0.84357	0.85017	0.85680	0.86346	0.87015	0.87688	0.88363	0.89042	0.89723	0.90408	0.91095
4 1 2004	0.80256	0.80931	0.81609	0.82291	0.82975	0.83663	0.84353	0.85047	0.85743	0.86442	0.87144	0.87850	0.88558	0.89268	0.89982	0.90699
10 1 2004	0.80234	0.80907	0.81583	0.82263	0.82946	0.83632	0.84322	0.85015	0.85712	0.86411	0.87114	0.87821	0.88530	0.89243	0.89959	0.90678
4 1 2005	0.79423	0.80126	0.80832	0.81541	0.82253	0.82969	0.83688	0.84410	0.85135	0.85864	0.86595	0.87330	0.88068	0.88809	0.89553	0.90300
10 1 2005	0.79401	0.80101	0.80805	0.81512	0.82223	0.82938	0.83656	0.84378	0.85103	0.85832	0.86565	0.87301	0.88040	0.88783	0.89529	0.90279
4 1 2006	0.78625	0.79354	0.80086	0.80822	0.81561	0.82303	0.83050	0.83799	0.84552	0.85309	0.86068	0.86831	0.87598	0.88368	0.89141	0.89917
10 1 2006	0.78603	0.79329	0.80059	0.80792	0.81530	0.82272	0.83017	0.83767	0.84520	0.85277	0.86038	0.86802	0.87570	0.88342	0.89117	0.89896
4 1 2007	0.77860	0.78614	0.79371	0.80132	0.80897	0.81666	0.82438	0.83214	0.83993	0.84777	0.85563	0.86354	0.87148	0.87945	0.88746	0.89550
10 1 2007	0.77837	0.78588	0.79343	0.80103	0.80866	0.81634	0.82406	0.83181	0.83961	0.84745	0.85533	0.86324	0.87120	0.87919	0.88722	0.89529
4 1 2008	0.77127	0.77904	0.78686	0.79471	0.80261	0.81054	0.81852	0.82653	0.83458	0.84267	0.85080	0.85896	0.86716	0.87540	0.88368	0.89199
10 1 2008	0.77104	0.77879	0.78658	0.79442	0.80230	0.81023	0.81819	0.82620	0.83426	0.84235	0.85049	0.85867	0.86688	0.87514	0.88344	0.89178
4 1 2009	0.76424	0.77225	0.78029	0.78838	0.79651	0.80469	0.81290	0.82115	0.82945	0.83779	0.84616	0.85458	0.86303	0.87152	0.88005	0.88862
10 1 2009	0.76401	0.77199	0.78002	0.78809	0.79621	0.80437	0.81258	0.82083	0.82913	0.83747	0.84586	0.85429	0.86276	0.87127	0.87983	0.88842

Maturing on or Before	5.500	5.625	5.750	5.875	6.000	6.125	6.250	6.375	6.500	6.625	6.750	6.875	7.000	7.125	7.250	7.375
4 1 2010	0.75751	0.76574	0.77400	0.78232	0.79068	0.79908	0.80752	0.81601	0.82454	0.83311	0.84172	0.85038	0.85907	0.86781	0.87659	0.88540
10 1 2010	0.75728	0.76548	0.77373	0.78203	0.79037	0.79877	0.80720	0.81569	0.82422	0.83280	0.84142	0.85009	0.85881	0.86756	0.87636	0.88521
4 1 2011	0.75106	0.75950	0.76798	0.77651	0.78509	0.79371	0.80237	0.81108	0.81984	0.82863	0.83748	0.84636	0.85529	0.86426	0.87327	0.88232
10 1 2011	0.75084	0.75925	0.76771	0.77622	0.78479	0.79340	0.80206	0.81077	0.81953	0.82833	0.83718	0.84608	0.85503	0.86402	0.87305	0.88213
4 1 2012	0.74489	0.75353	0.76221	0.77095	0.77973	0.78856	0.79744	0.80637	0.81534	0.82435	0.83341	0.84252	0.85167	0.86086	0.87010	0.87938
10 1 2012	0.73715	0.74567	0.75424	0.76287	0.77155	0.78028	0.78905	0.79788	0.80676	0.81569	0.82466	0.83369	0.84276	0.85187	0.86104	0.87025
4 1 2013	0.73132	0.74006	0.74885	0.75769	0.76658	0.77551	0.78450	0.79353	0.80261	0.81174	0.82091	0.83013	0.83940	0.84870	0.85806	0.86745
10 1 2013	0.73113	0.73984	0.74861	0.75743	0.76630	0.77523	0.78421	0.79324	0.80232	0.81145	0.82063	0.82986	0.83914	0.84847	0.85784	0.86726
4 1 2014	0.72556	0.73448	0.74345	0.75248	0.76155	0.77068	0.77986	0.78908	0.79836	0.80768	0.81705	0.82647	0.83593	0.84544	0.85500	0.86460
10 1 2014	0.72536	0.73426	0.74321	0.75222	0.76128	0.77040	0.77957	0.78879	0.79807	0.80740	0.81678	0.82620	0.83568	0.84521	0.85479	0.86441
4 1 2015	0.72004	0.72914	0.73829	0.74749	0.75675	0.76606	0.77542	0.78483	0.79429	0.80380	0.81336	0.82297	0.83262	0.84233	0.85208	0.86187
10 1 2015	0.71985	0.72893	0.73806	0.74724	0.75649	0.76579	0.77514	0.78455	0.79401	0.80353	0.81310	0.82272	0.83239	0.84211	0.85188	0.86170
4 1 2016	0.71478	0.72403	0.73335	0.74273	0.75216	0.76164	0.77118	0.78076	0.79040	0.80010	0.80984	0.81963	0.82947	0.83935	0.84929	0.85927
10 1 2016	0.71458	0.72383	0.73313	0.74249	0.75190	0.76138	0.77091	0.78050	0.79014	0.79984	0.80959	0.81939	0.82924	0.83915	0.84910	0.85911
4 1 2017	0.70972	0.71914	0.72863	0.73817	0.74777	0.75742	0.76713	0.77688	0.78670	0.79656	0.80647	0.81644	0.82645	0.83652	0.84663	0.85679
10 1 2017	0.70954	0.71895	0.72842	0.73794	0.74753	0.75717	0.76687	0.77663	0.78644	0.79631	0.80624	0.81621	0.82624	0.83633	0.84646	0.85664
4 1 2018	0.70489	0.71448	0.72412	0.73382	0.74358	0.75339	0.76326	0.77318	0.78316	0.79319	0.80327	0.81340	0.82358	0.83382	0.84410	0.85443
10 1 2018	0.70473	0.71429	0.72391	0.73360	0.74334	0.75315	0.76301	0.77294	0.78291	0.79295	0.80304	0.81319	0.82338	0.83364	0.84394	0.85429
4 1 2019	0.70028	0.71001	0.71981	0.72966	0.73957	0.74954	0.75956	0.76964	0.77978	0.78997	0.80021	0.81050	0.82085	0.83124	0.84169	0.85218
10 1 2019	0.70012	0.70984	0.71961	0.72945	0.73935	0.74931	0.75933	0.76941	0.77955	0.78974	0.79999	0.81030	0.82066	0.83107	0.84154	0.85206
4 1 2020	0.69587	0.70575	0.71569	0.72569	0.73575	0.74586	0.75604	0.76627	0.77656	0.78690	0.79729	0.80774	0.81824	0.82879	0.83939	0.85004
10 1 2020	0.69572	0.70558	0.71550	0.72549	0.73554	0.74565	0.75582	0.76605	0.77634	0.78669	0.79709	0.80755	0.81807	0.82863	0.83926	0.84993
4 1 2021	0.69166	0.70167	0.71175	0.72190	0.73210	0.74236	0.75268	0.76305	0.77348	0.78397	0.79451	0.80511	0.81575	0.82645	0.83720	0.84800
10 1 2021	0.69152	0.70151	0.71158	0.72171	0.73190	0.74215	0.75247	0.76284	0.77328	0.78377	0.79432	0.80493	0.81559	0.82631	0.83708	0.84791
4 1 2022	0.68763	0.69778	0.70800	0.71827	0.72861	0.73901	0.74947	0.75998	0.77055	0.78118	0.79186	0.80260	0.81339	0.82423	0.83512	0.84606
10 1 2022	0.68750	0.69763	0.70783	0.71810	0.72843	0.73882	0.74927	0.75979	0.77036	0.78100	0.79169	0.80244	0.81324	0.82410	0.83502	0.84598
4 1 2023	0.68378	0.69406	0.70441	0.71482	0.72529	0.73582	0.74641	0.75705	0.76776	0.77852	0.78934	0.80021	0.81114	0.82211	0.83314	0.84422
10 1 2023	0.68366	0.69392	0.70425	0.71465	0.72511	0.73564	0.74623	0.75687	0.76758	0.77835	0.78918	0.80007	0.81101	0.82200	0.83305	0.84415
4 1 2024	0.68011	0.69051	0.70098	0.71152	0.72211	0.73277	0.74349	0.75427	0.76510	0.77599	0.78694	0.79794	0.80899	0.82010	0.83126	0.84247
10 1 2024	0.67999	0.69038	0.70084	0.71136	0.72195	0.73260	0.74332	0.75410	0.76494	0.77584	0.78679	0.79781	0.80888	0.82000	0.83118	0.84241
4 1 2025	0.67660	0.68712	0.69771	0.70837	0.71909	0.72987	0.74071	0.75161	0.76257	0.77358	0.78465	0.79578	0.80696	0.81819	0.82947	0.84080
10 1 2025	0.67649	0.68700	0.69758	0.70823	0.71894	0.72971	0.74055	0.75146	0.76242	0.77344	0.78452	0.79566	0.80685	0.81810	0.82941	0.84076
4 1 2026	0.67324	0.68389	0.69459	0.70537	0.71620	0.72710	0.73806	0.74908	0.76015	0.77129	0.78248	0.79372	0.80502	0.81637	0.82777	0.83922
10 1 2026	0.67315	0.68378	0.69447	0.70523	0.71606	0.72696	0.73792	0.74894	0.76002	0.77116	0.78236	0.79362	0.80493	0.81630	0.82772	0.83920
4 1 2027	0.67004	0.68080	0.69162	0.70250	0.71345	0.72446	0.73553	0.74667	0.75786	0.76910	0.78041	0.79177	0.80318	0.81464	0.82616	0.83772
10 1 2027	0.66996	0.68070	0.69151	0.70238	0.71332	0.72433	0.73540	0.74654	0.75774	0.76899	0.78031	0.79168	0.80310	0.81459	0.82612	0.83771
4 1 2028	0.66699	0.67785	0.68878	0.69977	0.71083	0.72195	0.73313	0.74437	0.75567	0.76703	0.77844	0.78991	0.80143	0.81300	0.82463	0.83630

Maturing on or Before	7.500	7.625	7.750	7.875	8.000	8.125	8.250	8.375	8.500	8.625	8.750	8.875	9.000	9.125	9.250	9.375
10 1 1988	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
4 1 1989	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
10 1 1989	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
4 1 1990	0.99926	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
10 1 1990	0.99815	0.99949	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
4 1 1991	0.99528	0.99715	0.99903	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
10 1 1991	0.99356	0.99545	0.99735	0.99925	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
4 1 1992	0.98909	0.99149	0.99389	0.99630	0.99871	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
10 1 1992	0.98678	0.98920	0.99162	0.99405	0.99648	0.99892	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
4 1 1993	0.98385	0.98676	0.98967	0.99259	0.99552	0.99845	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
10 1 1993	0.98097	0.98390	0.98684	0.98978	0.99273	0.99568	0.99864	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
4 1 1994	0.97416	0.97754	0.98094	0.98433	0.98774	0.99115	0.99456	0.99798	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
10 1 1994	0.97425	0.97766	0.98109	0.98452	0.98796	0.99141	0.99486	0.99833	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
4 1 1995	0.96664	0.97048	0.97434	0.97820	0.98207	0.98594	0.98983	0.99372	0.99762	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
10 1 1995	0.96272	0.96657	0.97044	0.97431	0.97820	0.98210	0.98601	0.98993	0.99386	0.99780	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
4 1 1996	0.95834	0.96262	0.96691	0.97121	0.97552	0.97984	0.98418	0.98852	0.99287	0.99723	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
10 1 1996	0.95833	0.96264	0.96697	0.97130	0.97565	0.98001	0.98439	0.98878	0.99318	0.99759	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
4 1 1997	0.94934	0.95404	0.95874	0.96345	0.96818	0.97292	0.97767	0.98244	0.98721	0.99200	0.99680	1.00000	1.00000	1.00000	1.00000	1.00000
10 1 1997	0.94929	0.95401	0.95874	0.96349	0.96826	0.97304	0.97784	0.98265	0.98747	0.99231	0.99717	1.00000	1.00000	1.00000	1.00000	1.00000
4 1 1998	0.94488	0.94999	0.95511	0.96024	0.96539	0.97055	0.97573	0.98093	0.98613	0.99135	0.99659	1.00000	1.00000	1.00000	1.00000	1.00000
10 1 1998	0.94480	0.94994	0.95509	0.96027	0.96545	0.97066	0.97589	0.98113	0.98639	0.99166	0.99695	1.00000	1.00000	1.00000	1.00000	1.00000
4 1 1999	0.94058	0.94609	0.95161	0.95715	0.96270	0.96827	0.97386	0.97947	0.98509	0.99073	0.99638	1.00000	1.00000	1.00000	1.00000	1.00000
10 1 1999	0.94048	0.94602	0.95158	0.95716	0.96275	0.96837	0.97401	0.97966	0.98534	0.99103	0.99675	1.00000	1.00000	1.00000	1.00000	1.00000
4 1 2000	0.93644	0.94233	0.94824	0.95417	0.96011	0.96608	0.97206	0.97806	0.98409	0.99013	0.99619	1.00000	1.00000	1.00000	1.00000	1.00000
10 1 2000	0.93633	0.94225	0.94820	0.95416	0.96015	0.96616	0.97220	0.97825	0.98433	0.99043	0.99655	1.00000	1.00000	1.00000	1.00000	1.00000
4 1 2001	0.93246	0.93872	0.94500	0.95130	0.95762	0.96396	0.97033	0.97671	0.98312	0.98955	0.99600	1.00000	1.00000	1.00000	1.00000	1.00000
10 1 2001	0.93233	0.93863	0.94494	0.95129	0.95765	0.96404	0.97046	0.97690	0.98336	0.98985	0.99636	1.00000	1.00000	1.00000	1.00000	1.00000
4 1 2002	0.92863	0.93524	0.94188	0.94854	0.95522	0.96193	0.96866	0.97541	0.98219	0.98899	0.99581	1.00000	1.00000	1.00000	1.00000	1.00000
10 1 2002	0.92849	0.93514	0.94182	0.94852	0.95525	0.96200	0.96879	0.97559	0.98243	0.98929	0.99617	1.00000	1.00000	1.00000	1.00000	1.00000
4 1 2003	0.92495	0.93190	0.93888	0.94589	0.95292	0.95997	0.96706	0.97416	0.98130	0.98845	0.99564	1.00000	1.00000	1.00000	1.00000	1.00000
10 1 2003	0.91785	0.92479	0.93175	0.93874	0.94576	0.95281	0.95988	0.96699	0.97412	0.98128	0.98847	0.99569	1.00000	1.00000	1.00000	1.00000
4 1 2004	0.91418	0.92140	0.92865	0.93593	0.94324	0.95057	0.95793	0.96532	0.97273	0.98017	0.98764	0.99513	1.00000	1.00000	1.00000	1.00000
10 1 2004	0.91401	0.92126	0.92855	0.93587	0.94322	0.95060	0.95800	0.96544	0.97291	0.98041	0.98794	0.99550	1.00000	1.00000	1.00000	1.00000
4 1 2005	0.91050	0.91803	0.92559	0.93318	0.94080	0.94845	0.95613	0.96384	0.97158	0.97934	0.98713	0.99496	1.00000	1.00000	1.00000	1.00000
10 1 2005	0.91032	0.91789	0.92548	0.93312	0.94078	0.94848	0.95620	0.96397	0.97176	0.97958	0.98744	0.99533	1.00000	1.00000	1.00000	1.00000
4 1 2006	0.90697	0.91479	0.92265	0.93054	0.93847	0.94642	0.95441	0.96242	0.97047	0.97855	0.98665	0.99479	1.00000	1.00000	1.00000	1.00000
10 1 2006	0.90679	0.91465	0.92255	0.93048	0.93844	0.94644	0.95448	0.96255	0.97065	0.97879	0.98696	0.99516	1.00000	1.00000	1.00000	1.00000
4 1 2007	0.90358	0.91169	0.91984	0.92802	0.93623	0.94448	0.95275	0.96106	0.96941	0.97778	0.98619	0.99463	1.00000	1.00000	1.00000	1.00000
10 1 2007	0.90340	0.91155	0.91973	0.92795	0.93621	0.94450	0.95283	0.96119	0.96959	0.97803	0.98650	0.99500	1.00000	1.00000	1.00000	1.00000
4 1 2008	0.90034	0.90872	0.91714	0.92560	0.93409	0.94261	0.95117	0.95976	0.96839	0.97705	0.98575	0.99447	1.00000	1.00000	1.00000	1.00000
10 1 2008	0.90016	0.90858	0.91704	0.92553	0.93407	0.94264	0.95125	0.95989	0.96858	0.97730	0.98605	0.99484	1.00000	1.00000	1.00000	1.00000
4 1 2009	0.89723	0.90588	0.91456	0.92328	0.93204	0.94083	0.94966	0.95852	0.96742	0.97635	0.98532	0.99433	1.00000	1.00000	1.00000	1.00000
10 1 2009	0.89706	0.90574	0.91446	0.92322	0.93202	0.94086	0.94974	0.95865	0.96761	0.97660	0.98563	0.99470	1.00000	1.00000	1.00000	1.00000

Maturing on or Before			7.500	7.625	7.750	7.875	8.000	8.125	8.250	8.375	8.500	8.625	8.750	8.875	9.000	9.125	9.250	9.375
4	1	2010	0.89426	0.90316	0.91209	0.92106	0.93008	0.93912	0.94821	0.95733	0.96649	0.97569	0.98492	0.99419	1.00000	1.00000	1.00000	1.00000
10	1	2010	0.89409	0.90302	0.91200	0.92101	0.93006	0.93916	0.94829	0.95747	0.96668	0.97594	0.98523	0.99456	1.00000	1.00000	1.00000	1.00000
4	1	2011	0.89142	0.90055	0.90973	0.91895	0.92820	0.93749	0.94683	0.95620	0.96560	0.97505	0.98453	0.99405	1.00000	1.00000	1.00000	1.00000
10	1	2011	0.89126	0.90043	0.90964	0.91890	0.92819	0.93753	0.94691	0.95634	0.96580	0.97530	0.98484	0.99442	1.00000	1.00000	1.00000	1.00000
4	1	2012	0.88870	0.89807	0.90747	0.91692	0.92641	0.93594	0.94550	0.95511	0.96476	0.97444	0.98416	0.99392	1.00000	1.00000	1.00000	1.00000
10	1	2012	0.87950	0.88880	0.89814	0.90753	0.91696	0.92643	0.93594	0.94550	0.95510	0.96473	0.97441	0.98413	0.99389	1.00000	1.00000	1.00000
4	1	2013	0.87689	0.88638	0.89590	0.90547	0.91508	0.92473	0.93442	0.94415	0.95392	0.96372	0.97357	0.98345	0.99337	1.00000	1.00000	1.00000
10	1	2013	0.87673	0.88624	0.89580	0.90541	0.91505	0.92474	0.93448	0.94426	0.95407	0.96393	0.97384	0.98378	0.99376	1.00000	1.00000	1.00000
4	1	2014	0.87421	0.88393	0.89366	0.90344	0.91326	0.92311	0.93301	0.94296	0.95294	0.96296	0.97302	0.98311	0.99325	1.00000	1.00000	1.00000
10	1	2014	0.87409	0.88381	0.89357	0.90338	0.91324	0.92314	0.93308	0.94307	0.95310	0.96317	0.97329	0.98344	0.99363	1.00000	1.00000	1.00000
4	1	2015	0.87171	0.88160	0.89153	0.90150	0.91152	0.92158	0.93168	0.94182	0.95200	0.96223	0.97249	0.98279	0.99313	1.00000	1.00000	1.00000
10	1	2015	0.87157	0.88148	0.89145	0.90146	0.91151	0.92161	0.93175	0.94194	0.95217	0.96245	0.97276	0.98312	0.99352	1.00000	1.00000	1.00000
4	1	2016	0.86930	0.87937	0.88949	0.89966	0.90986	0.92011	0.93041	0.94074	0.95112	0.96153	0.97199	0.98249	0.99302	1.00000	1.00000	1.00000
10	1	2016	0.86917	0.87927	0.88942	0.89962	0.90986	0.92015	0.93049	0.94087	0.95129	0.96176	0.97227	0.98282	0.99341	1.00000	1.00000	1.00000
4	1	2017	0.86700	0.87725	0.88755	0.89790	0.90829	0.91872	0.92920	0.93971	0.95027	0.96087	0.97151	0.98219	0.99291	1.00000	1.00000	1.00000
10	1	2017	0.86688	0.87716	0.88749	0.89787	0.90830	0.91877	0.92929	0.93985	0.95045	0.96110	0.97179	0.98253	0.99330	1.00000	1.00000	1.00000
4	1	2018	0.86481	0.87524	0.88571	0.89623	0.90679	0.91739	0.92804	0.93874	0.94947	0.96025	0.97106	0.98192	0.99281	1.00000	1.00000	1.00000
10	1	2018	0.86470	0.87515	0.88566	0.89621	0.90681	0.91745	0.92814	0.93888	0.94966	0.96048	0.97135	0.98225	0.99320	1.00000	1.00000	1.00000
4	1	2019	0.86272	0.87331	0.88395	0.89463	0.90536	0.91613	0.92695	0.93781	0.94871	0.95965	0.97063	0.98166	0.99272	1.00000	1.00000	1.00000
10	1	2019	0.86263	0.87325	0.88391	0.89463	0.90539	0.91620	0.92706	0.93796	0.94890	0.95989	0.97092	0.98199	0.99310	1.00000	1.00000	1.00000
4	1	2020	0.86074	0.87149	0.88228	0.89312	0.90401	0.91494	0.92591	0.93693	0.94798	0.95908	0.97023	0.98141	0.99263	1.00000	1.00000	1.00000
10	1	2020	0.86065	0.87143	0.88225	0.89313	0.90405	0.91501	0.92603	0.93708	0.94819	0.95933	0.97052	0.98175	0.99301	1.00000	1.00000	1.00000
4	1	2021	0.85885	0.86975	0.88069	0.89168	0.90272	0.91380	0.92492	0.93609	0.94730	0.95855	0.96984	0.98117	0.99254	1.00000	1.00000	1.00000
10	1	2021	0.85878	0.86970	0.88068	0.89170	0.90277	0.91389	0.92505	0.93626	0.94751	0.95880	0.97014	0.98151	0.99293	1.00000	1.00000	1.00000
4	1	2022	0.85705	0.86809	0.87918	0.89032	0.90149	0.91272	0.92399	0.93530	0.94665	0.95804	0.96947	0.98095	0.99246	1.00000	1.00000	1.00000
10	1	2022	0.85700	0.86806	0.87918	0.89035	0.90156	0.91282	0.92412	0.93547	0.94686	0.95830	0.96977	0.98129	0.99285	1.00000	1.00000	1.00000
4	1	2023	0.85535	0.86652	0.87775	0.88902	0.90033	0.91169	0.92310	0.93454	0.94603	0.95756	0.96913	0.98074	0.99238	1.00000	1.00000	1.00000
10	1	2023	0.85530	0.86651	0.87776	0.88906	0.90041	0.91180	0.92324	0.93472	0.94625	0.95782	0.96943	0.98108	0.99277	1.00000	1.00000	1.00000
4	1	2024	0.85373	0.86503	0.87639	0.88779	0.89923	0.91072	0.92225	0.93383	0.94545	0.95710	0.96880	0.98054	0.99231	1.00000	1.00000	1.00000
10	1	2024	0.85370	0.86503	0.87641	0.88784	0.89932	0.91084	0.92241	0.93402	0.94567	0.95737	0.96911	0.98088	0.99270	1.00000	1.00000	1.00000
4	1	2025	0.85219	0.86362	0.87510	0.88662	0.89819	0.90980	0.92146	0.93315	0.94489	0.95667	0.96849	0.98035	0.99224	1.00000	1.00000	1.00000
10	1	2025	0.85217	0.86362	0.87513	0.88668	0.89828	0.90993	0.92162	0.93335	0.94513	0.95694	0.96880	0.98070	0.99263	1.00000	1.00000	1.00000
4	1	2026	0.85072	0.86227	0.87387	0.88551	0.89720	0.90893	0.92070	0.93251	0.94437	0.95626	0.96820	0.98017	0.99217	1.00000	1.00000	1.00000
10	1	2026	0.85072	0.86229	0.87392	0.88559	0.89730	0.90907	0.92087	0.93272	0.94461	0.95654	0.96851	0.98052	0.99257	1.00000	1.00000	1.00000
4	1	2027	0.84934	0.86100	0.87271	0.88446	0.89626	0.90810	0.91999	0.93191	0.94387	0.95588	0.96792	0.98000	0.99211	1.00000	1.00000	1.00000
10	1	2027	0.84935	0.86103	0.87277	0.88455	0.89638	0.90825	0.92016	0.93212	0.94412	0.95616	0.96824	0.98035	0.99251	1.00000	1.00000	1.00000
4	1	2028	0.84802	0.85979	0.87161	0.88347	0.89537	0.90732	0.91931	0.93134	0.94341	0.95551	0.96766	0.97984	0.99205	00000	1.00000	1.00000

Maturing On or Before	9.500	9.625	9.750	10.000	10.500	10.625	10.750	11.375	11.625	12.250	12.375
10 1 1988	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
4 1 1989	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
10 1 1989	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
4 1 1990	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
10 1 1990	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
4 1 1991	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
10 1 1991	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
4 1 1992	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
10 1 1992	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
4 1 1993	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
10 1 1993	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
4 1 1994	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
10 1 1994	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
4 1 1995	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
10 1 1995	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
4 1 1996	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
10 1 1996	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
4 1 1997	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
10 1 1997	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
4 1 1998	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
10 1 1998	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
4 1 1999	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
10 1 1999	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
4 1 2000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
10 1 2000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
4 1 2001	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
10 1 2001	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
4 1 2002	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
10 1 2002	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
4 1 2003	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
10 1 2003	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
4 1 2004	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
10 1 2004	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
4 1 2005	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
10 1 2005	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
4 1 2006	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
10 1 2006	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
4 1 2007	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
10 1 2007	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
4 1 2008	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
10 1 2008	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
4 1 2009	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
10 1 2009	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000

Maturing On or Before	9.500	9.625	9.750	10.000	10.500	10.625	10.750	11.375	11.625	12.250	12.375
4 1 2010	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
10 1 2010	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
4 1 2011	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
10 1 2011	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
4 1 2012	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
10 1 2012	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
4 1 2013	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
10 1 2013	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
4 1 2014	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
10 1 2014	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
4 1 2015	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
10 1 2015	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
4 1 2016	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
10 1 2016	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
4 1 2017	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
10 1 2017	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
4 1 2018	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
10 1 2018	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
4 1 2019	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
10 1 2019	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
4 1 2020	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
10 1 2020	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
4 1 2021	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
10 1 2021	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
4 1 2022	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
10 1 2022	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
4 1 2023	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
10 1 2023	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
4 1 2024	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
10 1 2024	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
4 1 2025	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
10 1 2025	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
4 1 2026	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
10 1 2026	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
4 1 2027	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
10 1 2027	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
4 1 2028	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000

FARMERS HOME ADMINISTRATION 1988 DISCOUNT PURCHASE PROGRAM
Purchase Price of Community Program Loans
For borrowers using TAX EXEMPT sources of financing and paying interest SEMIANNUALLY, QUARTERLY, OR MONTHLY
Closing on or after MAY 10, 1988 but not after JUNE 9, 1988

Maturing on or Before	3.500	3.625	3.750	3.875	4.000	4.125	4.250	4.375	4.500	4.625	4.750	4.875	5.000	5.125	5.250	5.375
10 1 1988	0.99647	0.99664	0.99682	0.99699	0.99716	0.99733	0.99750	0.99768	0.99785	0.99802	0.99819	0.99836	0.99853	0.99871	0.99888	0.99905
4 1 1989	0.98805	0.98852	0.98899	0.98946	0.98994	0.99041	0.99088	0.99135	0.99183	0.99230	0.99277	0.99325	0.99372	0.99419	0.99467	0.99514
10 1 1989	0.97834	0.97911	0.97987	0.98063	0.98140	0.98216	0.98293	0.98369	0.98446	0.98522	0.98599	0.98676	0.98753	0.98829	0.98906	0.98983
4 1 1990	0.96709	0.96814	0.96918	0.97023	0.97128	0.97232	0.97337	0.97442	0.97547	0.97652	0.97757	0.97863	0.97968	0.98073	0.98179	0.98285
10 1 1990	0.95697	0.95829	0.95961	0.96093	0.96226	0.96358	0.96491	0.96623	0.96756	0.96889	0.97022	0.97156	0.97289	0.97423	0.97556	0.97690
4 1 1991	0.94650	0.94809	0.94967	0.95126	0.95285	0.95445	0.95604	0.95764	0.95924	0.96084	0.96244	0.96405	0.96565	0.96726	0.96887	0.97049
10 1 1991	0.93570	0.93754	0.93939	0.94124	0.94309	0.94494	0.94680	0.94866	0.95052	0.95238	0.95425	0.95612	0.95799	0.95987	0.96175	0.96363
4 1 1992	0.92460	0.92669	0.92879	0.93089	0.93299	0.93509	0.93720	0.93932	0.94143	0.94355	0.94567	0.94780	0.94993	0.95206	0.95420	0.95634
10 1 1992	0.91322	0.91556	0.91789	0.92023	0.92258	0.92493	0.92728	0.92964	0.93200	0.93437	0.93674	0.93911	0.94149	0.94387	0.94626	0.94865
4 1 1993	0.90405	0.90662	0.90920	0.91178	0.91437	0.91696	0.91955	0.92216	0.92476	0.92737	0.92999	0.93261	0.93524	0.93788	0.94051	0.94316
10 1 1993	0.89240	0.89519	0.89799	0.90080	0.90361	0.90643	0.90925	0.91209	0.91492	0.91777	0.92062	0.92347	0.92633	0.92920	0.93207	0.93495
4 1 1994	0.88053	0.88354	0.88656	0.88958	0.89261	0.89565	0.89869	0.90174	0.90480	0.90787	0.91094	0.91402	0.91711	0.92020	0.92330	0.92641
10 1 1994	0.87151	0.87474	0.87797	0.88121	0.88446	0.88772	0.89099	0.89426	0.89755	0.90084	0.90414	0.90745	0.91076	0.91409	0.91742	0.92076
4 1 1995	0.85946	0.86289	0.86632	0.86976	0.87321	0.87667	0.88014	0.88362	0.88711	0.89061	0.89412	0.89763	0.90116	0.90470	0.90824	0.91179
10 1 1995	0.84727	0.85088	0.85450	0.85813	0.86178	0.86543	0.86909	0.87277	0.87645	0.88015	0.88386	0.88757	0.89130	0.89504	0.89879	0.90254
4 1 1996	0.83845	0.84226	0.84608	0.84991	0.85376	0.85761	0.86148	0.86536	0.86925	0.87315	0.87707	0.88100	0.88493	0.88888	0.89284	0.89681
10 1 1996	0.82983	0.83383	0.83784	0.84187	0.84591	0.84996	0.85403	0.85810	0.86220	0.86630	0.87042	0.87455	0.87869	0.88285	0.88702	0.89120
4 1 1997	0.81757	0.82173	0.82591	0.83011	0.83431	0.83854	0.94277	0.84702	0.85129	0.85557	0.85986	0.86417	0.86849	0.87283	0.87718	0.88154
10 1 1997	0.80916	0.81350	0.81786	0.82224	0.82663	0.83104	0.83546	0.83990	0.84436	0.84883	0.85331	0.85781	0.86233	0.86686	0.87140	0.87596
4 1 1998	0.80093	0.80545	0.80999	0.81454	0.81911	0.82370	0.82831	0.83293	0.83757	0.84222	0.84689	0.85158	0.85628	0.86101	0.86574	0.87050
10 1 1998	0.79289	0.79758	0.80228	0.80701	0.81176	0.81652	0.82130	0.82610	0.83092	0.83575	0.84060	0.84548	0.85037	0.85527	0.86020	0.86514
4 1 1999	0.78501	0.78987	0.79474	0.79964	0.80455	0.80948	0.81444	0.81941	0.82440	0.82941	0.83445	0.83950	0.84457	0.84966	0.85477	0.85989
10 1 1999	0.77731	0.78233	0.78736	0.79242	0.79750	0.80260	0.80772	0.81286	0.81803	0.82321	0.82841	0.83364	0.83889	0.84415	0.84944	0.85475
4 1 2000	0.76977	0.77494	0.78014	0.78536	0.79060	0.79586	0.80114	0.80645	0.81178	0.81713	0.82251	0.82790	0.83332	0.83876	0.84422	0.84971
10 1 2000	0.76240	0.76772	0.77307	0.77844	0.78384	0.78926	0.79470	0.80017	0.80566	0.81118	0.81672	0.82228	0.82787	0.83348	0.83911	0.84477
4 1 2001	0.75518	0.76065	0.76615	0.77167	0.77722	0.78280	0.78840	0.79402	0.79967	0.80535	0.81105	0.81678	0.82253	0.82830	0.83410	0.83993
10 1 2001	0.74812	0.75373	0.75938	0.76505	0.77075	0.77647	0.78223	0.78800	0.79381	0.79964	0.80550	0.81139	0.81730	0.82323	0.82920	0.83519
4 1 2002	0.74121	0.74696	0.75275	0.75857	0.76441	0.77028	0.77618	0.78211	0.78807	0.79405	0.80006	0.80610	0.81217	0.81827	0.82439	0.83054
10 1 2002	0.73444	0.74034	0.74626	0.75222	0.75820	0.76422	0.77026	0.77634	0.78244	0.78858	0.79474	0.80093	0.80715	0.81340	0.81968	0.82599
4 1 2003	0.72782	0.73385	0.73991	0.74601	0.75213	0.75828	0.76447	0.77069	0.77693	0.78321	0.78952	0.79586	0.80224	0.80864	0.81507	0.82153
10 1 2003	0.71610	0.72221	0.72836	0.73453	0.74075	0.74699	0.75326	0.75957	0.76591	0.77228	0.77869	0.78512	0.79159	0.79809	0.80462	0.81119
4 1 2004	0.70968	0.71592	0.72219	0.72850	0.73483	0.74121	0.74762	0.75406	0.76053	0.76704	0.77358	0.78016	0.78677	0.79341	0.80009	0.80679
10 1 2004	0.70340	0.70976	0.71615	0.72258	0.72905	0.73555	0.74209	0.74866	0.75527	0.76191	0.76859	0.77530	0.78205	0.78883	0.79564	0.80250
4 1 2005	0.69726	0.70373	0.71025	0.71680	0.72339	0.73002	0.73668	0.74338	0.75011	0.75689	0.76370	0.77054	0.77742	0.78434	0.79130	0.79828
10 1 2005	0.69124	0.69784	0.70447	0.71114	0.71785	0.72460	0.73138	0.73821	0.74507	0.75197	0.75891	0.76589	0.77290	0.77995	0.78704	0.79416
4 1 2006	0.68536	0.69207	0.69881	0.70560	0.71243	0.71929	0.72620	0.73315	0.74013	0.74716	0.75422	0.76133	0.76847	0.77565	0.78287	0.79013
10 1 2006	0.67961	0.68642	0.69328	0.70018	0.70712	0.71410	0.72113	0.72819	0.73530	0.74245	0.74963	0.75686	0.76413	0.77144	0.77879	0.78617

Maturing on or Before			3.500	3.625	3.750	3.875	4.000	4.125	4.250	4.375	4.500	4.625	4.750	4.875	5.000	5.125	5.250	5.375
4	1	2007	0.67397	0.68090	0.68786	0.69487	0.70193	0.70902	0.71616	0.72334	0.73057	0.73783	0.74514	0.75249	0.75988	0.76732	0.77479	0.78231
10	1	2007	0.66846	0.67549	0.68256	0.68968	0.69684	0.70405	0.71130	0.71860	0.72594	0.73332	0.74075	0.74821	0.75573	0.76328	0.77088	0.77852
4	1	2008	0.66307	0.67020	0.67737	0.68460	0.69187	0.69918	0.70654	0.71395	0.72140	0.72890	0.73644	0.74403	0.75166	0.75933	0.76705	0.77481
10	1	2008	0.65779	0.66502	0.67230	0.67962	0.68700	0.69442	0.70189	0.70940	0.71697	0.72457	0.73223	0.73993	0.74767	0.75547	0.76330	0.77118
4	1	2009	0.65262	0.65995	0.66733	0.67475	0.68223	0.68976	0.69733	0.70495	0.71262	0.72034	0.72810	0.73592	0.74378	0.75168	0.75963	0.76763
10	1	2009	0.64756	0.65499	0.66246	0.66999	0.67757	0.68519	0.69287	0.70060	0.70837	0.71620	0.72407	0.73199	0.73996	0.74798	0.75604	0.76415
4	1	2010	0.64261	0.65013	0.65770	0.66533	0.67300	0.68073	0.68850	0.69633	0.70421	0.71214	0.72012	0.72815	0.73622	0.74435	0.75253	0.76075
10	1	2010	0.63777	0.64538	0.65304	0.66076	0.66853	0.67635	0.68423	0.69216	0.70014	0.70817	0.71625	0.72438	0.73257	0.74080	0.74909	0.75742
4	1	2011	0.63303	0.64073	0.64848	0.65629	0.66416	0.67207	0.68005	0.68807	0.69615	0.70428	0.71246	0.72070	0.72899	0.73733	0.74572	0.75416
10	1	2011	0.62839	0.63618	0.64402	0.65192	0.65987	0.66788	0.67595	0.68407	0.69225	0.70048	0.70876	0.71710	0.72549	0.73393	0.74242	0.75097
4	1	2012	0.62385	0.63172	0.63965	0.64764	0.65568	0.66378	0.67194	0.68016	0.68843	0.69675	0.70513	0.71357	0.72206	0.73060	0.73920	0.74785
10	1	2012	0.61329	0.62116	0.62910	0.63709	0.64514	0.65324	0.66141	0.66963	0.67791	0.68624	0.69463	0.70308	0.71158	0.72013	0.72874	0.73740
4	1	2013	0.60891	0.61686	0.62488	0.63295	0.64108	0.64928	0.65753	0.66584	0.67421	0.68263	0.69111	0.69965	0.70824	0.71689	0.72560	0.73436
10	1	2013	0.60462	0.61265	0.62075	0.62890	0.63712	0.64540	0.65373	0.66213	0.67058	0.67910	0.68767	0.69630	0.70498	0.71372	0.72252	0.73138
4	1	2014	0.60042	0.60853	0.61671	0.62494	0.63324	0.64160	0.65002	0.65850	0.66704	0.67564	0.68430	0.69301	0.70179	0.71062	0.71952	0.72846
10	1	2014	0.59632	0.60450	0.61275	0.62106	0.62944	0.63788	0.64638	0.65494	0.66357	0.67225	0.68100	0.68980	0.69867	0.70759	0.71657	0.72561
4	1	2015	0.59230	0.60056	0.60888	0.61727	0.62572	0.63424	0.64282	0.65147	0.66017	0.66894	0.67777	0.68666	0.69561	0.70463	0.71370	0.72283
10	1	2015	0.58836	0.59669	0.60509	0.61356	0.62209	0.63068	0.63934	0.64806	0.65685	0.66570	0.67462	0.68359	0.69263	0.70172	0.71088	0.72010
4	1	2016	0.58451	0.59291	0.60138	0.60992	0.61853	0.62720	0.63593	0.64474	0.65360	0.66253	0.67153	0.68059	0.68970	0.69889	0.70813	0.71743
10	1	2016	0.58074	0.58922	0.59776	0.60637	0.61504	0.62379	0.63260	0.64148	0.65042	0.65943	0.66851	0.67764	0.68685	0.69611	0.70544	0.71482
4	1	2017	0.57705	0.58559	0.59420	0.60288	0.61163	0.62045	0.62934	0.63829	0.64731	0.65640	0.66555	0.67477	0.68405	0.69339	0.70280	0.71227
10	1	2017	0.57344	0.58205	0.59073	0.59948	0.60830	0.61719	0.62614	0.63517	0.64427	0.65343	0.66266	0.67195	0.68131	0.69074	0.70023	0.70978
4	1	2018	0.56991	0.57858	0.58732	0.59614	0.60503	0.61399	0.62302	0.63212	0.64129	0.65053	0.65983	0.66920	0.678[illegible]	0.68814	0.69771	0.70734
10	1	2018	0.56644	0.57518	0.58399	0.59288	0.60183	0.61086	0.61996	0.62913	0.63837	0.64768	0.65706	0.66651	0.67602	0.68560	0.69525	0.70496
4	1	2019	0.56306	0.57198	0.58073	0.58968	0.59870	0.60780	0.61697	0.62621	0.63552	0.64490	0.65436	0.66387	0.67346	0.68312	0.69284	0.70262
10	1	2019	0.55974	0.56860	0.57754	0.58655	0.59564	0.60480	0.61404	0.62335	0.63273	0.64218	0.65171	0.66130	0.67096	0.68069	0.69048	0.70034
4	1	2020	0.55649	0.56541	0.57441	0.58349	0.59264	0.60187	0.61118	0.62055	0.63000	0.63952	0.64912	0.65878	0.66851	0.67831	0.68818	0.69812
10	1	2020	0.55331	0.56229	0.57135	0.58049	0.58971	0.59900	0.60837	0.61781	0.62733	0.63692	0.64658	0.65631	0.66612	0.67599	0.68593	0.69594
4	1	2021	0.55020	0.55924	0.56836	0.57756	0.58684	0.59619	0.60563	0.61513	0.62472	0.63437	0.64410	0.65390	0.66377	0.67372	0.68373	0.69381
10	1	2021	0.54715	0.55625	0.56543	0.57469	0.58403	0.59344	0.60294	0.61251	0.62216	0.63188	0.64168	0.65154	0.66148	0.67149	0.68158	0.69172
4	1	2022	0.54416	0.55332	0.56256	0.57188	0.58128	0.59075	0.60031	0.60995	0.61966	0.62944	0.63930	0.64924	0.65924	0.66932	0.67947	0.68969
10	1	2022	0.54124	0.55045	0.55975	0.56912	0.57858	0.58812	0.59774	0.60744	0.61721	0.62706	0.63698	0.64698	0.65705	0.66720	0.67741	0.68770
4	1	2023	0.53837	0.54764	0.55699	0.56643	0.57595	0.58554	0.59522	0.60498	0.61481	0.62473	0.63471	0.64478	0.65491	0.66512	0.67540	0.68575
10	1	2023	0.53557	0.54489	0.55430	0.56379	0.57336	0.58302	0.59276	0.60257	0.61247	0.62244	0.63249	0.64262	0.65282	0.66309	0.67344	0.68385
4	1	2024	0.53282	0.54220	0.55166	0.56121	0.57084	0.58055	0.59035	0.60022	0.61018	0.62021	0.63032	0.64051	0.65077	0.66111	0.67151	0.68199
10	1	2024	0.53014	0.53956	0.54908	0.55868	0.56837	0.57813	0.58799	0.59792	0.60793	0.61803	0.62820	0.63844	0.64877	0.65916	0.66964	0.68018
4	1	2025	0.52750	0.53698	0.54655	0.55620	0.56594	0.57577	0.58568	0.59567	0.60574	0.61589	0.62612	0.63643	0.64681	0.65727	0.66780	0.67840
10	1	2025	0.52492	0.53445	0.54407	0.55378	0.56357	0.57345	0.58342	0.59346	0.60359	0.61380	0.62409	0.63445	0.64489	0.65541	0.66600	0.67667
4	1	2026	0.52240	0.53198	0.54165	0.55141	0.56125	0.57119	0.58120	0.59131	0.60149	0.61175	0.62210	0.63252	0.64302	0.65360	0.66425	0.67497
10	1	2026	0.51992	0.52955	0.53927	0.54908	0.55898	0.56897	0.57904	0.58920	0.59943	0.60975	0.62015	0.63063	0.64119	0.65183	0.66253	0.67332
4	1	2027	0.51750	0.52718	0.53695	0.54681	0.55676	0.56680	0.57692	0.58713	0.59742	0.60780	0.61825	0.62879	0.63940	0.65009	0.66086	0.67170
10	1	2027	0.51512	0.52485	0.53467	0.54458	0.55458	0.56467	0.57485	0.58511	0.59545	0.60588	0.61639	0.62698	0.63765	0.64840	0.65922	0.67012
4	1	2028	0.51280	0.52257	0.53244	0.54240	0.55245	0.56259	0.57282	0.58313	0.59353	0.60401	0.61457	0.62522	0.63594	0.64674	0.65762	0.66857

aturing on r Before	5.500	5.625	5.750	5.875	6.000	6.125	6.250	6.375	6.500	6.625	6.750	6.875	7.000	7.125	7.250	7.375
1 1988	0.99922	0.99939	0.99957	0.99974	0.99991	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
1 1989	0.99561	0.99609	0.99656	0.99704	0.99751	0.99799	0.99846	0.99894	0.99941	0.99989	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
1 1989	0.99060	0.99137	0.99214	0.99291	0.99369	0.99446	0.99523	0.99600	0.99678	0.99755	0.99833	0.99910	0.99988	1.00000	1.00000	1.00000
1 1990	0.98390	0.98496	0.98602	0.98708	0.98814	0.98920	0.99026	0.99133	0.99239	0.99346	0.99452	0.99559	0.99666	0.99772	0.99879	0.99986
1 1990	0.97824	0.97958	0.98092	0.98227	0.98361	0.98496	0.98631	0.98766	0.98901	0.99036	0.99171	0.99307	0.99442	0.99578	0.99714	0.99850
1 1991	0.97210	0.97372	0.97534	0.97696	0.97858	0.98021	0.98183	0.98346	0.98509	0.98672	0.98836	0.99000	0.99163	0.99327	0.99492	0.99656
1 1991	0.96551	0.96739	0.96928	0.97117	0.97307	0.97496	0.97686	0.97876	0.98067	0.98257	0.98448	0.98639	0.98831	0.99023	0.99215	0.99407
1 1992	0.95848	0.96063	0.96278	0.96493	0.96709	0.96925	0.97141	0.97358	0.97575	0.97792	0.98010	0.98228	0.98447	0.98665	0.98884	0.99104
1 1992	0.95105	0.95345	0.95585	0.95826	0.96067	0.96309	0.96551	0.96793	0.97036	0.97280	0.97523	0.97768	0.98012	0.98257	0.98503	0.98749
1 1993	0.94581	0.94846	0.95112	0.95378	0.95645	0.95912	0.96180	0.96449	0.96718	0.96987	0.97257	0.97527	0.97798	0.98070	0.98342	0.98614
1 1993	0.93784	0.94073	0.94363	0.94653	0.94944	0.95236	0.95528	0.95821	0.96115	0.96409	0.96703	0.96998	0.97294	0.97591	0.97888	0.98185
1 1994	0.92952	0.93265	0.93578	0.93891	0.94206	0.94521	0.94836	0.95153	0.95470	0.95788	0.96106	0.96426	0.96746	0.97066	0.97388	0.97710
1 1994	0.92411	0.92747	0.93084	0.93421	0.93759	0.94098	0.94438	0.94778	0.95120	0.95462	0.95805	0.96149	0.96493	0.96839	0.97185	0.97532
1 1995	0.91536	0.91893	0.92251	0.92610	0.92970	0.93331	0.93693	0.94056	0.94419	0.94784	0.95149	0.95516	0.95883	0.96251	0.96620	0.96990
1 1995	0.90831	0.91009	0.91388	0.91768	0.92149	0.92531	0.92914	0.93298	0.93683	0.94069	0.94456	0.94845	0.95234	0.95624	0.96015	0.96407
1 1996	0.90080	0.90479	0.90880	0.91282	0.91685	0.92089	0.92494	0.92901	0.93308	0.93717	0.94127	0.94538	0.94950	0.95363	0.95777	0.96193
1 1996	0.89539	0.89960	0.90382	0.90805	0.91230	0.91655	0.92082	0.92511	0.92940	0.93371	0.93803	0.94236	0.94671	0.95107	0.95544	0.95982
1 1997	0.88592	0.89031	0.89472	0.89914	0.90357	0.90802	0.91248	0.91695	0.92144	0.92594	0.93046	0.93499	0.93953	0.94409	0.94866	0.95324
1 1997	0.88054	0.88513	0.88974	0.89436	0.89900	0.90365	0.90832	0.91300	0.91770	0.92241	0.92714	0.93188	0.93664	0.94141	0.94620	0.95100
1 1998	0.87527	0.88006	0.88486	0.88968	0.89452	0.89937	0.90424	0.90913	0.91403	0.91895	0.92388	0.92884	0.93380	0.93878	0.94378	0.94880
1 1998	0.87010	0.87508	0.88008	0.88510	0.89013	0.89518	0.90025	0.90533	0.91043	0.91555	0.92069	0.92585	0.93102	0.93621	0.94142	0.94664
1 1999	0.86504	0.87021	0.87539	0.88060	0.88582	0.89106	0.89633	0.90161	0.90690	0.91222	0.91756	0.92291	0.92829	0.93368	0.93909	0.94452
1 1999	0.86008	0.86543	0.87080	0.87619	0.88160	0.88703	0.89248	0.89795	0.90344	0.90896	0.91449	0.92004	0.92561	0.93120	0.93681	0.94244
1 2000	0.85522	0.86074	0.86629	0.87187	0.87746	0.88308	0.88871	0.89437	0.90005	0.90575	0.91147	0.91722	0.92298	0.92877	0.93457	0.94040
1 2000	0.85045	0.85615	0.86188	0.86763	0.87340	0.87920	0.88502	0.89086	0.89672	0.90261	0.90852	0.91445	0.92040	0.92638	0.93238	0.93840
1 2001	0.84578	0.85166	0.85755	0.86348	0.86943	0.87540	0.88140	0.88742	0.89346	0.89953	0.90562	0.91174	0.91788	0.92404	0.93023	0.93644
1 2001	0.84120	0.84725	0.85332	0.85941	0.86553	0.87167	0.87784	0.88404	0.89026	0.89651	0.90278	0.90908	0.91540	0.92175	0.92812	0.93452
1 2002	0.83672	0.84293	0.84916	0.85542	0.86171	0.86802	0.87436	0.88073	0.88713	0.89355	0.90000	0.90647	0.91297	0.91950	0.92605	0.93263
1 2002	0.83233	0.83870	0.84509	0.85151	0.85797	0.86445	0.87095	0.87749	0.88406	0.89065	0.89727	0.90392	0.91059	0.91729	0.92402	0.93078
1 2003	0.82803	0.83455	0.84110	0.84769	0.85430	0.86094	0.86761	0.87431	0.88104	0.88780	0.89459	0.90141	0.90826	0.91513	0.92203	0.92897
1 2003	0.81778	0.82441	0.83106	0.83775	0.84447	0.85122	0.85800	0.86481	0.87165	0.87852	0.88542	0.89235	0.89931	0.90630	0.91332	0.92037
1 2004	0.81354	0.82031	0.82712	0.83395	0.84082	0.84773	0.85466	0.86163	0.86862	0.87565	0.88271	0.88981	0.89693	0.90408	0.91127	0.91848
1 2004	0.80938	0.81630	0.82325	0.83023	0.83725	0.84431	0.85139	0.85851	0.86566	0.87285	0.88006	0.88731	0.89459	0.90191	0.90925	0.91663
1 2005	0.80531	0.81237	0.81946	0.82659	0.83376	0.84096	0.84819	0.85546	0.86276	0.87010	0.87747	0.88487	0.89230	0.89977	0.90728	0.91481
1 2005	0.80132	0.80852	0.81576	0.82303	0.83033	0.83768	0.84506	0.85247	0.85992	0.86740	0.87492	0.88248	0.89006	0.89769	0.90534	0.91303
1 2006	0.79742	0.80476	0.81213	0.81954	0.82698	0.83447	0.84199	0.84954	0.85714	0.86477	0.87243	0.88013	0.88787	0.89564	0.90345	0.91129
1 2006	0.79360	0.80107	0.80857	0.81612	0.82370	0.83132	0.83898	0.84668	0.85441	0.86218	0.86999	0.87784	0.88572	0.89364	0.90160	0.90959
1 2007	0.78986	0.79746	0.80509	0.81277	0.82049	0.82824	0.83604	0.84387	0.85174	0.85966	0.86761	0.87559	0.88362	0.89168	0.89978	0.90792
1 2007	0.78620	0.79392	0.80169	0.80949	0.81734	0.82523	0.83316	0.84113	0.84913	0.85718	0.86527	0.87340	0.88156	0.88977	0.89801	0.90629
1 2008	0.78262	0.79046	0.79835	0.80629	0.81426	0.82228	0.83034	0.83844	0.84658	0.85476	0.86298	0.87125	0.87955	0.88789	0.89627	0.90469
1 2008	0.77911	0.78708	0.79509	0.80315	0.81125	0.81939	0.82758	0.83581	0.84408	0.85239	0.86074	0.86914	0.87758	0.88605	0.89457	0.90313
1 2009	0.77567	0.78376	0.79190	0.80008	0.80830	0.81657	0.82488	0.83323	0.84163	0.85007	0.85855	0.86708	0.87565	0.88426	0.89291	0.90160
1 2009	0.77231	0.78052	0.78877	0.79707	0.80541	0.81380	0.82223	0.83071	0.83924	0.84780	0.85641	0.86506	0.87376	0.88250	0.89128	0.90010

aturing on or Before	5.500	5.625	5.750	5.875	6.000	6.125	6.250	6.375	6.500	6.625	6.750	6.875	7.000	7.125	7.250	7.375
1 2010	0.76902	0.77734	0.78571	0.79413	0.80259	0.81109	0.81965	0.82825	0.83689	0.84558	0.85432	0.86309	0.87192	0.88078	0.88969	0.89864
1 2010	0.76580	0.77424	0.78272	0.79125	0.79982	0.80845	0.81712	0.82583	0.83460	0.84341	0.85226	0.86116	0.87011	0.87910	0.88813	0.89721
1 2011	0.76265	0.77120	0.77979	0.78843	0.79712	0.80586	0.81464	0.82347	0.83236	0.84128	0.85026	0.85928	0.86834	0.87745	0.88661	0.89581
1 2011	0.75957	0.76822	0.77692	0.78567	0.79447	0.80332	0.81222	0.82117	0.83016	0.83920	0.84830	0.85743	0.86662	0.87585	0.88512	0.89444
1 2012	0.75655	0.76531	0.77411	0.78297	0.79188	0.80084	0.80985	0.81891	0.82802	0.83717	0.84638	0.85563	0.86493	0.87427	0.88367	0.89310
1 2012	0.74612	0.75489	0.76371	0.77258	0.78150	0.79048	0.79950	0.80858	0.81770	0.82687	0.83610	0.84536	0.85468	0.86405	0.87346	0.88291
1 2013	0.74317	0.75204	0.76096	0.76993	0.77896	0.78803	0.79716	0.80634	0.81557	0.82485	0.83418	0.84356	0.85298	0.86246	0.87198	0.88154
1 2013	0.74029	0.74925	0.75827	0.76734	0.77647	0.78565	0.79488	0.80416	0.81349	0.82287	0.83231	0.84179	0.85132	0.86090	0.87053	0.88021
1 2014	0.73747	0.74653	0.75564	0.76481	0.77403	0.78331	0.79264	0.80202	0.81146	0.82094	0.83048	0.84006	0.84970	0.85939	0.86912	0.87890
1 2014	0.73471	0.74386	0.75307	0.76234	0.77166	0.78103	0.79046	0.79994	0.80947	0.81905	0.82869	0.83838	0.84812	0.85790	0.86774	0.87762
1 2015	0.73201	0.74126	0.75056	0.75992	0.76933	0.77880	0.78832	0.79790	0.80753	0.81721	0.82694	0.83673	0.84657	0.85645	0.86639	0.87638
1 2015	0.72937	0.73871	0.74810	0.75755	0.76705	0.77662	0.78623	0.79590	0.80563	0.81541	0.82524	0.83512	0.84506	0.85504	0.86508	0.87516
1 2016	0.72679	0.73622	0.74570	0.75524	0.76483	0.77448	0.78419	0.79395	0.80377	0.81364	0.82357	0.83355	0.84358	0.85366	0.86379	0.87397
1 2016	0.72427	0.73378	0.74335	0.75297	0.76266	0.77240	0.78220	0.79205	0.80196	0.81192	0.82194	0.83201	0.84214	0.85231	0.86254	0.87281
1 2017	0.72180	0.73140	0.74105	0.75076	0.76053	0.77036	0.78025	0.79019	0.80019	0.81024	0.82035	0.83051	0.84073	0.85099	0.86131	0.87168
1 2017	0.71939	0.72907	0.73880	0.74860	0.75846	0.76837	0.77834	0.78837	0.79846	0.80860	0.81880	0.82905	0.83935	0.84971	0.86012	0.87058
1 2018	0.71703	0.72679	0.73661	0.74649	0.75643	0.76643	0.77648	0.78660	0.79677	0.80700	0.81728	0.82762	0.83801	0.84845	0.85895	0.86950
1 2018	0.71473	0.72457	0.73446	0.74442	0.75445	0.76453	0.77467	0.78486	0.79512	0.80543	0.81580	0.82622	0.83670	0.84723	0.85781	0.86845
1 2019	0.71248	0.72239	0.73237	0.74241	0.75251	0.76267	0.77289	0.78317	0.79351	0.80390	0.81435	0.82486	0.83542	0.84603	0.85670	0.86742
1 2019	0.71027	0.72026	0.73032	0.74044	0.75061	0.76085	0.77115	0.78151	0.79193	0.80241	0.81294	0.82353	0.83417	0.84487	0.85562	0.86642
1 2020	0.70812	0.71818	0.72831	0.73851	0.74876	0.75908	0.76946	0.77990	0.79039	0.80095	0.81156	0.82223	0.83295	0.84373	0.85456	0.86544
1 2020	0.70601	0.71615	0.72636	0.73663	0.74696	0.75735	0.76781	0.77832	0.78889	0.79953	0.81021	0.82096	0.83176	0.84262	0.85353	0.86449
1 2021	0.70395	0.71417	0.72444	0.73479	0.74519	0.75566	0.76619	0.77678	0.78743	0.79814	0.80890	0.81972	0.83060	0.84153	0.85252	0.86356
1 2021	0.70194	0.71222	0.72257	0.73299	0.74347	0.75401	0.76461	0.77527	0.78600	0.79678	0.80762	0.81852	0.82947	0.84048	0.85154	0.86265
1 2022	0.69997	0.71033	0.72075	0.73123	0.74178	0.75239	0.76307	0.77380	0.78460	0.79546	0.80637	0.81734	0.82836	0.83945	0.85058	0.86177
1 2022	0.69805	0.70847	0.71896	0.72952	0.74014	0.75082	0.76156	0.77237	0.78324	0.79416	0.80515	0.81619	0.82729	0.83844	0.84965	0.86091
1 2023	0.69617	0.70666	0.71722	0.72784	0.73853	0.74928	0.76009	0.77097	0.78191	0.79290	0.80396	0.81507	0.82624	0.83746	0.84874	0.86007
1 2023	0.69434	0.70489	0.71552	0.72620	0.73696	0.74778	0.75866	0.76960	0.78061	0.79167	0.80279	0.81397	0.82521	0.83650	0.84785	0.85925
1 2024	0.69254	0.70316	0.71385	0.72461	0.73543	0.74631	0.75726	0.76827	0.77934	0.79047	0.80166	0.81291	0.82421	0.83557	0.84698	0.85845
1 2024	0.69079	0.70147	0.71223	0.72304	0.73393	0.74488	0.75589	0.76697	0.77810	0.78930	0.80055	0.81187	0.82324	0.83466	0.84614	0.85767
1 2025	0.68908	0.69982	0.71064	0.72152	0.73247	0.74348	0.75456	0.76570	0.77690	0.78816	0.79948	0.81085	0.82229	0.83378	0.84532	0.85692
1 2025	0.68740	0.69821	0.70909	0.72003	0.73104	0.74211	0.75325	0.76446	0.77572	0.78704	0.79842	0.80986	0.82136	0.83291	0.84452	0.85618
1 2026	0.68577	0.69664	0.70757	0.71858	0.72965	0.74078	0.75198	0.76325	0.77457	0.78595	0.79740	0.80890	0.82046	0.83207	0.84374	0.85546
1 2026	0.68417	0.69510	0.70609	0.71715	0.72829	0.73948	0.75074	0.76206	0.77345	0.78489	0.79640	0.80796	0.81958	0.83125	0.84298	0.85476
1 2027	0.68261	0.69359	0.70465	0.71577	0.72696	0.73821	0.74953	0.76091	0.77236	0.78386	0.79542	0.80704	0.81872	0.83045	0.84224	0.85408
1 2027	0.68108	0.69212	0.70323	0.71441	0.72566	0.73697	0.74835	0.75979	0.77129	0.78285	0.79447	0.80615	0.81789	0.82967	0.84152	0.85341
1 2028	0.67959	0.69069	0.70186	0.71309	0.72439	0.73576	0.74720	0.75869	0.77025	0.78187	0.79355	0.80528	0.81707	0.82892	0.84082	0.85277

Maturing on or Before	7.500	7.625	7.750	7.875	8.000	8.125	8.250	8.375	8.500	8.625	8.750	8.875	9.000	9.125	9.250	9.375
10 1 1988	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
4 1 1989	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
10 1 1989	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
4 1 1990	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
10 1 1990	0.99986	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
4 1 1991	0.99821	0.99985	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
10 1 1991	0.99599	0.99792	0.99985	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
4 1 1992	0.99323	0.99543	0.99764	0.99985	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
10 1 1992	0.98995	0.99242	0.99489	0.99736	0.99984	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
4 1 1993	0.98887	0.99161	0.99435	0.99709	0.99984	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
10 1 1993	0.98484	0.98782	0.99082	0.99382	0.99682	0.99984	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
4 1 1994	0.98032	0.98356	0.98680	0.99005	0.99330	0.99656	0.99983	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
10 1 1994	0.97880	0.98228	0.98578	0.98928	0.99279	0.99630	0.99983	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
4 1 1995	0.97361	0.97733	0.98106	0.98479	0.98854	0.99229	0.99605	0.99983	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
10 1 1995	0.96800	0.97195	0.97590	0.97986	0.98383	0.98781	0.99181	0.99581	0.99982	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
4 1 1996	0.96609	0.97027	0.97446	0.97866	0.98287	0.98709	0.99132	0.99557	0.99982	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
10 1 1996	0.96422	0.96862	0.97304	0.97748	0.98192	0.98638	0.99085	0.99533	0.99982	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
4 1 1997	0.95784	0.96245	0.96707	0.97171	0.97636	0.98103	0.98570	0.99039	0.99510	0.99981	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
10 1 1997	0.95581	0.96065	0.96549	0.97035	0.97523	0.98011	0.98502	0.98994	0.99487	0.99981	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
4 1 1998	0.95383	0.95888	0.96394	0.96902	0.97411	0.97922	0.98435	0.98949	0.99464	0.99981	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
10 1 1998	0.95188	0.95714	0.96241	0.96771	0.97302	0.97834	0.98368	0.98904	0.99442	0.99981	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
4 1 1999	0.94997	0.95543	0.96092	0.96642	0.97194	0.97748	0.98304	0.98861	0.99420	0.99981	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
10 1 1999	0.94809	0.95376	0.95945	0.96516	0.97089	0.97663	0.98240	0.98819	0.99399	0.99981	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
4 1 2000	0.94625	0.95212	0.95801	0.96392	0.96985	0.97580	0.98178	0.98777	0.99378	0.99981	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
10 1 2000	0.94444	0.95051	0.95660	0.96271	0.96884	0.97499	0.98116	0.98736	0.99358	0.99981	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
4 1 2001	0.94267	0.94893	0.95521	0.96151	0.96784	0.97419	0.98056	0.98696	0.99337	0.99981	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
10 1 2001	0.94094	0.94738	0.95385	0.96035	0.96686	0.97341	0.97997	0.98656	0.99318	0.99981	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
4 1 2002	0.93923	0.94586	0.95252	0.95920	0.96591	0.97264	0.97939	0.98618	0.99298	0.99981	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
10 1 2002	0.93756	0.94437	0.95121	0.95808	0.96497	0.97188	0.97883	0.98580	0.99279	0.99981	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
4 1 2003	0.93593	0.94291	0.94993	0.95697	0.96405	0.97115	0.97827	0.98543	0.99261	0.99981	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
10 1 2003	0.92745	0.93456	0.94170	0.94886	0.95605	0.96328	0.97053	0.97781	0.98511	0.99245	0.99981	1.00000	1.00000	1.00000	1.00000	1.00000
4 1 2004	0.92573	0.93300	0.94031	0.94764	0.95501	0.96240	0.96982	0.97728	0.98476	0.99227	0.99981	1.00000	1.00000	1.00000	1.00000	1.00000
10 1 2004	0.92404	0.93147	0.93895	0.94645	0.95398	0.96154	0.96914	0.97676	0.98441	0.99210	0.99981	1.00000	1.00000	1.00000	1.00000	1.00000
4 1 2005	0.92238	0.92998	0.93761	0.94528	0.95297	0.96070	0.96846	0.97625	0.98407	0.99193	0.99981	1.00000	1.00000	1.00000	1.00000	1.00000
10 1 2005	0.92076	0.92852	0.93631	0.94413	0.95199	0.95988	0.96780	0.97575	0.98374	0.99176	0.99981	1.00000	1.00000	1.00000	1.00000	1.00000
4 1 2006	0.91917	0.92708	0.93503	0.94301	0.95102	0.95907	0.96715	0.97527	0.98342	0.99160	0.99981	1.00000	1.00000	1.00000	1.00000	1.00000
10 1 2006	0.91762	0.92568	0.93378	0.94191	0.95008	0.95828	0.96652	0.97479	0.98310	0.99144	0.99981	1.00000	1.00000	1.00000	1.00000	1.00000
4 1 2007	0.91610	0.92431	0.93255	0.94084	0.94916	0.95751	0.96590	0.97433	0.98279	0.99128	0.99981	1.00000	1.00000	1.00000	1.00000	1.00000
10 1 2007	0.91461	0.92296	0.93136	0.93979	0.94825	0.95676	0.96530	0.97387	0.98248	0.99113	0.99981	1.00000	1.00000	1.00000	1.00000	1.00000
4 1 2008	0.91315	0.92165	0.93018	0.93876	0.94737	0.95602	0.96470	0.97343	0.98218	0.99098	0.99981	1.00000	1.00000	1.00000	1.00000	1.00000
10 1 2008	0.91173	0.92036	0.92904	0.93775	0.94650	0.95530	0.96412	0.97299	0.98189	0.99083	0.99981	1.00000	1.00000	1.00000	1.00000	1.00000
4 1 2009	0.91033	0.91910	0.92792	0.93677	0.94566	0.95459	0.96356	0.97256	0.98161	0.99069	0.99981	1.00000	1.00000	1.00000	1.00000	1.00000
10 1 2009	0.90897	0.91787	0.92682	0.93580	0.94483	0.95390	0.96300	0.97215	0.98133	0.99055	0.99981	1.00000	1.00000	1.00000	1.00000	1.00000

Maturing on or Before	7.500	7.625	7.750	7.875	8.000	8.125	8.250	8.375	8.500	8.625	8.750	8.875	9.000	9.125	9.250	9.375
4 1 2010	0.90763	0.91667	0.92575	0.93486	0.94402	0.95322	0.96246	0.97174	0.98106	0.99041	0.99981	1.00000	1.00000	1.00000	1.00000	1.00000
10 1 2010	0.90633	0.91549	0.92470	0.93394	0.94323	0.95256	0.96193	0.97134	0.98079	0.99028	0.99981	1.00000	1.00000	1.00000	1.00000	1.00000
4 1 2011	0.90505	0.91434	0.92367	0.93304	0.94246	0.95191	0.96141	0.97095	0.98053	0.99015	0.99981	1.00000	1.00000	1.00000	1.00000	1.00000
10 1 2011	0.90381	0.91322	0.92267	0.93216	0.94170	0.95128	0.96091	0.97057	0.98028	0.99002	0.99981	1.00000	1.00000	1.00000	1.00000	1.00000
4 1 2012	0.90259	0.91212	0.92169	0.93130	0.94096	0.95067	0.96041	0.97020	0.98003	0.98990	0.99981	1.00000	1.00000	1.00000	1.00000	1.00000
10 1 2012	0.89242	0.90196	0.91155	0.92119	0.93087	0.94059	0.95036	0.96016	0.97001	0.97990	0.98983	0.99980	1.00000	1.00000	1.00000	1.00000
4 1 2013	0.89116	0.90082	0.91052	0.92027	0.93006	0.93990	0.94978	0.95970	0.96966	0.97967	0.98972	0.99980	1.00000	1.00000	1.00000	1.00000
10 1 2013	0.88993	0.89970	0.90951	0.91937	0.92927	0.93922	0.94921	0.95925	0.96932	0.97944	0.98960	0.99980	1.00000	1.00000	1.00000	1.00000
4 1 2014	0.88873	0.89860	0.90852	0.91849	0.92850	0.93856	0.94866	0.95881	0.96899	0.97922	0.98949	0.99980	1.00000	1.00000	1.00000	1.00000
10 1 2014	0.88756	0.89754	0.90756	0.91764	0.92775	0.93792	0.94812	0.95837	0.96867	0.97901	0.98938	0.99980	1.00000	1.00000	1.00000	1.00000
4 1 2015	0.88641	0.89649	0.90662	0.91680	0.92702	0.93729	0.94760	0.95795	0.96835	0.97879	0.98928	0.99980	1.00000	1.00000	1.00000	1.00000
10 1 2015	0.88529	0.89548	0.90571	0.91598	0.92630	0.93667	0.94709	0.95754	0.96804	0.97859	0.98918	0.99980	1.00000	1.00000	1.00000	1.00000
4 1 2016	0.88420	0.89448	0.90481	0.91519	0.92561	0.93607	0.94659	0.95714	0.96774	0.97839	0.98907	0.99980	1.00000	1.00000	1.00000	1.00000
10 1 2016	0.88314	0.89351	0.90394	0.91441	0.92493	0.93549	0.94610	0.95675	0.96745	0.97819	0.98898	0.99980	1.00000	1.00000	1.00000	1.00000
4 1 2017	0.88210	0.89257	0.90308	0.9136[illegible]	0.92426	0.93492	0.94562	0.95637	0.96717	0.97800	0.98888	0.99980	1.00000	1.00000	1.00000	1.00000
10 1 2017	0.88109	0.89164	0.90225	0.91291	0.92361	0.93436	0.94516	0.95600	0.96689	0.97782	0.98879	0.99980	1.00000	1.00000	1.00000	1.00000
4 1 2018	0.88010	0.89074	0.90144	0.91219	0.92298	0.93382	0.94471	0.95564	0.96662	0.97764	0.98870	0.99980	1.00000	1.00000	1.00000	1.00000
10 1 2018	0.87913	0.88987	0.90065	0.91148	0.92237	0.93329	0.94427	0.95529	0.96635	0.97746	0.98861	0.99980	1.00000	1.00000	1.00000	1.00000
4 1 2019	0.87819	0.88901	0.89988	0.91080	0.92176	0.93278	0.94384	0.95494	0.96609	0.97729	0.98852	0.99980	1.00000	1.00000	1.00000	1.00000
10 1 2019	0.87727	0.88817	0.89913	0.91013	0.92118	0.93228	0.94342	0.95461	0.96584	0.97712	0.98844	0.99980	1.00000	1.00000	1.00000	1.00000
4 1 2020	0.87637	0.88736	0.89839	0.90948	0.92061	0.93179	0.94301	0.95428	0.96560	0.97696	0.98836	0.99980	1.00000	1.00000	1.00000	1.00000
10 1 2020	0.87550	0.88656	0.89768	0.90884	0.92005	0.93131	0.94262	0.95397	0.96536	0.97680	0.98828	0.99980	1.00000	1.00000	1.00000	1.00000
4 1 2021	0.87465	0.88579	0.89698	0.90822	0.91951	0.93085	0.94223	0.95366	0.96513	0.97664	0.98820	0.99980	1.00000	1.00000	1.00000	1.00000
10 1 2021	0.87382	0.88504	0.89630	0.90762	0.91898	0.93039	0.94185	0.95336	0.96490	0.97649	0.98813	0.99980	1.00000	1.00000	1.00000	1.00000
4 1 2022	0.87301	0.88430	0.89564	0.90703	0.91847	0.92995	0.94149	0.95306	0.96468	0.97635	0.98806	0.99980	1.00000	1.00000	1.00000	1.00000
10 1 2022	0.87222	0.88358	0.89500	0.90646	0.91797	0.92953	0.94113	0.95278	0.96447	0.97621	0.98798	0.99980	1.00000	1.00000	1.00000	1.00000
4 1 2023	0.87145	0.88288	0.89437	0.90590	0.91748	0.92911	0.94078	0.95250	0.96426	0.97607	0.98791	0.99980	1.00000	1.00000	1.00000	1.00000
10 1 2023	0.87070	0.88220	0.89375	0.90536	0.91700	0.92870	0.94044	0.95223	0.96406	0.97593	0.98785	0.99980	1.00000	1.00000	1.00000	1.00000
4 1 2024	0.86997	0.88154	0.89316	0.90483	0.91654	0.92831	0.94011	0.95197	0.96386	0.97580	0.98778	0.99980	1.00000	1.00000	1.00000	1.00000
10 1 2024	0.86926	0.88089	0.89258	0.90431	0.91609	0.92792	0.93979	0.95171	0.96367	0.97567	0.98772	0.99980	1.00000	1.00000	1.00000	1.00000
4 1 2025	0.86856	0.88026	0.89201	0.90381	0.91565	0.92754	0.93948	0.95146	0.96348	0.97555	0.98766	0.99980	1.00000	1.00000	1.00000	1.00000
10 1 2025	0.86789	0.87965	0.89146	0.90332	0.91523	0.92718	0.93918	0.95122	0.96330	0.97543	0.98760	0.99980	1.00000	1.00000	1.00000	1.00000
4 1 2026	0.86723	0.87905	0.89093	0.90285	0.91481	0.92683	0.93888	0.95098	0.96313	0.97531	0.98754	0.99980	1.00000	1.00000	1.00000	1.00000
10 1 2026	0.86659	0.87847	0.89040	0.90238	0.91441	0.92648	0.93860	0.95075	0.96296	0.97520	0.98748	0.99980	1.00000	1.00000	1.00000	1.00000
4 1 2027	0.86597	0.87791	0.88990	0.90193	0.91402	0.92614	0.93832	0.95053	0.96279	0.97509	0.98743	0.99980	1.00000	1.00000	1.00000	1.00000
10 1 2027	0.86536	0.87736	0.88940	0.90149	0.91363	0.92582	0.93805	0.95032	0.96263	0.97498	0.98737	0.99980	1.00000	1.00000	1.00000	1.00000
4 1 2028	0.86477	0.87682	0.88892	0.90107	0.91326	0.92550	0.93778	0.95011	0.96247	0.97488	0.98732	0.99980	1.00000	1.00000	1.00000	1.00000

Maturing on or Before	9.500	9.625	9.750	10.000	10.500	10.625	10.750	11.375	11.625	12.250	12.375
10 1 1988	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
4 1 1989	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
10 1 1989	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
4 1 1990	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
10 1 1990	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
4 1 1991	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
10 1 1991	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
4 1 1992	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
10 1 1992	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
4 1 1993	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
10 1 1993	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
4 1 1994	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
10 1 1994	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
4 1 1995	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
10 1 1995	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
4 1 1996	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
10 1 1996	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
4 1 1997	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
10 1 1997	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
4 1 1998	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
10 1 1998	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
4 1 1999	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
10 1 1999	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
4 1 2000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
10 1 2000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
4 1 2001	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
10 1 2001	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
4 1 2002	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
10 1 2002	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
4 1 2003	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
10 1 2003	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
4 1 2004	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
10 1 2004	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
4 1 2005	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
10 1 2005	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
4 1 2006	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
10 1 2006	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
4 1 2007	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
10 1 2007	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
4 1 2008	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
10 1 2008	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
4 1 2009	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
10 1 2009	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000

Maturing on or Before	9.500	9.625	9.750	10.000	10.500	10.625	10.750	11.375	11.625	12.250	12.375
4 1 2010	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
10 1 2010	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
4 1 2011	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
10 1 2011	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
4 1 2012	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
10 1 2012	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
4 1 2013	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
10 1 2013	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
4 1 2014	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
10 1 2014	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
4 1 2015	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
10 1 2015	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
4 1 2016	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
10 1 2016	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
4 1 2017	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
10 1 2017	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
4 1 2018	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
10 1 2018	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
4 1 2019	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
10 1 2019	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
4 1 2020	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
10 1 2020	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
4 1 2021	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
10 1 2021	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
4 1 2022	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
10 1 2022	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
4 1 2023	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
10 1 2023	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
4 1 2024	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
10 1 2024	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
4 1 2025	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
10 1 2025	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
4 1 2026	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
10 1 2026	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
4 1 2027	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
10 1 2027	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
4 1 2028	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000

FARMERS HOME ADMINISTRATION 1988 DISCOUNT PURCHASE PROGRAM
Purchase Price of Community Program Loans
For borrowers using NON TAX EXEMPT sources of financing and paying interest ANNUALLY
Closing on or after MAY 10, 1988 but not after JUNE 9, 1988

Maturing on or Before			3.500	3.625	3.750	3.875	4.000	4.125	4.250	4.375	4.500	4.625	4.750	4.875	5.000	5.125	5.250	5.375
10	1	1988	0.99381	0.99398	0.99414	0.99430	0.99447	0.99463	0.99480	0.99496	0.99512	0.99529	0.99545	0.99561	0.99578	0.99594	0.99610	0.99627
4	1	1989	0.96914	0.96988	0.97061	0.97135	0.97209	0.97283	0.97356	0.97430	0.97504	0.97578	0.97652	0.97725	0.97799	0.97873	0.97947	0.98020
10	1	1989	0.96714	0.96787	0.96859	0.96932	0.97004	0.97077	0.97149	0.97222	0.97295	0.97368	0.97441	0.97514	0.97587	0.97660	0.97734	0.97807
4	1	1990	0.93883	0.94010	0.94136	0.94263	0.94390	0.94517	0.94644	0.94771	0.94898	0.95025	0.95152	0.95279	0.95407	0.95534	0.95662	0.95789
10	1	1990	0.93797	0.93920	0.94045	0.94169	0.94293	0.94418	0.94543	0.94668	0.94793	0.94918	0.95044	0.95170	0.95295	0.95421	0.95548	0.95674
4	1	1991	0.91075	0.91251	0.91427	0.91603	0.91779	0.91956	0.92132	0.92309	0.92486	0.92663	0.92840	0.93018	0.93195	0.93373	0.93551	0.93729
10	1	1991	0.90955	0.91127	0.91299	0.91471	0.91644	0.91817	0.91990	0.92164	0.92337	0.92512	0.92686	0.92861	0.93036	0.93212	0.93387	0.93564
4	1	1992	0.88211	0.88432	0.88653	0.88874	0.89096	0.89318	0.89541	0.89763	0.89986	0.90209	0.90433	0.90657	0.90881	0.91105	0.91330	0.91555
10	1	1992	0.88064	0.88279	0.88495	0.88712	0.88928	0.89146	0.89363	0.89582	0.89800	0.90020	0.90239	0.90459	0.90680	0.90901	0.91123	0.91345
4	1	1993	0.85564	0.85827	0.86090	0.86354	0.86618	0.86883	0.87148	0.87414	0.87680	0.87946	0.88213	0.88480	0.88748	0.89016	0.89285	0.89554
10	1	1993	0.85392	0.85648	0.85905	0.86162	0.86420	0.86679	0.86938	0.87198	0.87459	0.87720	0.87982	0.88245	0.88508	0.88773	0.89037	0.89302
4	1	1994	0.82681	0.82981	0.83282	0.83583	0.83885	0.84188	0.84491	0.84795	0.85100	0.85405	0.85711	0.86018	0.86325	0.86633	0.86941	0.87250
10	1	1994	0.82393	0.82685	0.82977	0.83270	0.83565	0.83860	0.84155	0.84452	0.84750	0.85048	0.85348	0.85648	0.85949	0.86251	0.86554	0.86857
4	1	1995	0.79683	0.80016	0.80350	0.80685	0.81020	0.81357	0.81694	0.82032	0.82371	0.82711	0.83052	0.83393	0.83735	0.84078	0.84422	0.84767
10	1	1995	0.79489	0.79813	0.80137	0.80463	0.80790	0.81118	0.81447	0.81777	0.82108	0.82441	0.82774	0.83109	0.83444	0.83781	0.84118	0.84457
4	1	1996	0.77139	0.77504	0.77869	0.78236	0.78604	0.78973	0.79343	0.79714	0.80086	0.80459	0.80833	0.81208	0.81584	0.81961	0.82339	0.82718
10	1	1996	0.76868	0.77222	0.77577	0.77933	0.78291	0.78650	0.79010	0.79371	0.79734	0.80098	0.80464	0.80830	0.81198	0.81567	0.81938	0.82310
4	1	1997	0.74239	0.74630	0.75022	0.75415	0.75810	0.76206	0.76603	0.77001	0.77401	0.77801	0.78203	0.78606	0.79011	0.79416	0.79823	0.80231
10	1	1997	0.74384	0.74765	0.75147	0.75531	0.75917	0.76304	0.76693	0.77083	0.77475	0.77869	0.78264	0.78660	0.79058	0.79457	0.79858	0.80261
4	1	1998	0.72191	0.72610	0.73030	0.73452	0.73875	0.74299	0.74725	0.75153	0.75582	0.76012	0.76444	0.76877	0.77312	0.77748	0.78186	0.78625
10	1	1998	0.72342	0.72750	0.73160	0.73572	0.73986	0.74402	0.74819	0.75238	0.75659	0.76081	0.76506	0.76932	0.77360	0.77789	0.78221	0.78654
4	1	1999	0.70254	0.70698	0.71145	0.71593	0.72042	0.72494	0.72947	0.73402	0.73858	0.74316	0.74776	0.75237	0.75700	0.76165	0.76632	0.77100
10	1	1999	0.70410	0.70843	0.71279	0.71717	0.72157	0.72599	0.73043	0.73489	0.73937	0.74387	0.74839	0.75293	0.75749	0.76207	0.76667	0.77129
4	1	2000	0.68420	0.68889	0.69359	0.69832	0.70306	0.70783	0.71261	0.71742	0.72224	0.72708	0.73194	0.73682	0.74172	0.74663	0.75157	0.75652
10	1	2000	0.67786	0.68237	0.68691	0.69146	0.69605	0.70065	0.70528	0.70992	0.71459	0.71929	0.72400	0.72874	0.73350	0.73828	0.74308	0.74791
4	1	2001	0.65850	0.66335	0.66822	0.67311	0.67802	0.68295	0.68791	0.69288	0.69788	0.70289	0.70793	0.71299	0.71807	0.72317	0.72830	0.73344
10	1	2001	0.66027	0.66500	0.66975	0.67453	0.67934	0.68417	0.68902	0.69390	0.69880	0.70373	0.70868	0.71366	0.71866	0.72369	0.72874	0.73381
4	1	2002	0.64183	0.64688	0.65196	0.65706	0.66218	0.66733	0.67250	0.67769	0.68291	0.68815	0.69341	0.69870	0.70401	0.70934	0.71470	0.72008
10	1	2002	0.64363	0.64856	0.65352	0.65851	0.66352	0.66856	0.67363	0.67872	0.68384	0.68899	0.69417	0.69937	0.70460	0.70986	0.71514	0.72045
4	1	2003	0.62606	0.63130	0.63657	0.64186	0.64718	0.65253	0.65790	0.66330	0.66873	0.67418	0.67965	0.68516	0.69068	0.69623	0.70181	0.70741
10	1	2003	0.62364	0.62872	0.63383	0.63897	0.64414	0.64933	0.65456	0.65982	0.66511	0.67042	0.67577	0.68114	0.68654	0.69197	0.69743	0.70292
4	1	2004	0.60674	0.61212	0.61753	0.62296	0.62843	0.63392	0.63944	0.64499	0.65057	0.65618	0.66181	0.66747	0.67315	0.67887	0.68461	0.69038
10	1	2004	0.60865	0.61390	0.61919	0.62451	0.62986	0.63524	0.64065	0.64610	0.65158	0.65708	0.66263	0.66820	0.67380	0.67943	0.68510	0.69079
4	1	2005	0.59254	0.59808	0.60366	0.60927	0.61490	0.62057	0.62627	0.63199	0.63775	0.64354	0.64936	0.65520	0.66108	0.66699	0.67292	0.67889
10	1	2005	0.59446	0.59988	0.60533	0.61081	0.61634	0.62189	0.62748	0.63310	0.63876	0.64445	0.65018	0.65594	0.66173	0.66755	0.67341	0.67930
4	1	2006	0.57910	0.58480	0.59053	0.59629	0.60209	0.60792	0.61379	0.61968	0.62561	0.63157	0.63757	0.64359	0.64965	0.65573	0.66185	0.66800
10	1	2006	0.58103	0.58660	0.59220	0.59785	0.60353	0.60925	0.61500	0.62079	0.62662	0.63249	0.63839	0.64432	0.65029	0.65630	0.66234	0.66842

Maturing on or Before	3.500	3.625	3.750	3.875	4.000	4.125	4.250	4.375	4.500	4.625	4.750	4.875	5.000	5.125	5.250	5.375
4 1 2007	0.56637	0.57221	0.57809	0.58401	0.58996	0.59595	0.60197	0.60802	0.61411	0.62024	0.62639	0.63259	0.63881	0.64507	0.65136	0.65769
10 1 2007	0.56830	0.57401	0.57977	0.58556	0.59140	0.59727	0.60318	0.60913	0.61512	0.62115	0.62721	0.63332	0.63946	0.64563	0.65185	0.65810
4 1 2008	0.55431	0.56029	0.56631	0.57237	0.57847	0.58460	0.59077	0.59697	0.60322	0.60949	0.61581	0.62216	0.62855	0.63497	0.64142	0.64792
10 1 2008	0.55624	0.56209	0.56799	0.57392	0.57990	0.58592	0.59198	0.59808	0.60422	0.61040	0.61662	0.62289	0.62919	0.63553	0.64191	0.64833
4 1 2009	0.54289	0.54900	0.55515	0.56134	0.56757	0.57384	0.58015	0.58650	0.59289	0.59932	0.60578	0.61228	0.61882	0.62539	0.63201	0.63866
10 1 2009	0.54481	0.55079	0.55682	0.56289	0.56900	0.57516	0.58136	0.58760	0.59389	0.60022	0.60659	0.61300	0.61946	0.62596	0.63249	0.63907
4 1 2010	0.53206	0.53829	0.54457	0.55089	0.55725	0.56365	0.57009	0.57658	0.58310	0.58967	0.59627	0.60292	0.60960	0.61632	0.62309	0.62989
10 1 2010	0.53397	0.54008	0.54623	0.55242	0.55867	0.56496	0.57129	0.57767	0.58410	0.59056	0.59708	0.60364	0.61024	0.61688	0.62357	0.63030
4 1 2011	0.52179	0.52814	0.53454	0.54098	0.54746	0.55399	0.56056	0.56717	0.57382	0.58052	0.58726	0.59404	0.60086	0.60773	0.61463	0.62157
10 1 2011	0.52369	0.52991	0.53618	0.54250	0.54887	0.55528	0.56174	0.56825	0.57481	0.58141	0.58806	0.59476	0.60150	0.60828	0.61511	0.62199
4 1 2012	0.51205	0.51851	0.52502	0.53157	0.53817	0.54482	0.55151	0.55825	0.56503	0.57185	0.57872	0.58563	0.59258	0.59958	0.60662	0.61370
10 1 2012	0.50939	0.51566	0.52198	0.52835	0.53478	0.54125	0.54777	0.55434	0.56095	0.56762	0.57433	0.58109	0.58790	0.59475	0.60165	0.60860
4 1 2013	0.49820	0.50471	0.51126	0.51786	0.52451	0.53120	0.53794	0.54473	0.55156	0.55844	0.56537	0.57233	0.57935	0.58640	0.59350	0.60065
10 1 2013	0.50013	0.50650	0.51293	0.51941	0.52594	0.53252	0.53916	0.54584	0.55258	0.55936	0.56620	0.57308	0.58001	0.58699	0.59402	0.60109
4 1 2014	0.48943	0.49603	0.50269	0.50939	0.51614	0.52294	0.52979	0.53669	0.54363	0.55063	0.55766	0.56475	0.57188	0.57906	0.58628	0.59354
10 1 2014	0.49133	0.49781	0.50434	0.51092	0.51756	0.52425	0.53099	0.53779	0.54464	0.55154	0.55849	0.56549	0.57254	0.57964	0.58679	0.59399
4 1 2015	0.48110	0.48780	0.49455	0.50135	0.50820	0.51511	0.52206	0.52906	0.53611	0.54321	0.55036	0.55756	0.56480	0.57210	0.57943	0.58682
10 1 2015	0.48298	0.48955	0.49618	0.50286	0.50960	0.51639	0.52324	0.53015	0.53710	0.54411	0.55117	0.55829	0.56546	0.57267	0.57994	0.58726
4 1 2016	0.47320	0.47998	0.48683	0.49372	0.50067	0.50767	0.51472	0.52183	0.52898	0.53619	0.54344	0.55074	0.55810	0.56550	0.57295	0.58044
10 1 2016	0.47505	0.48171	0.48843	0.49521	0.50205	0.50894	0.51589	0.52290	0.52996	0.53707	0.54424	0.55146	0.55874	0.56607	0.57345	0.58088
4 1 2017	0.46751	0.47441	0.48137	0.48839	0.49546	0.50258	0.50976	0.51698	0.52427	0.53160	0.53899	0.54642	0.55391	0.56145	0.56904	0.57667
10 1 2017	0.46932	0.47610	0.48294	0.48983	0.49679	0.50381	0.51089	0.51802	0.52521	0.53246	0.53976	0.54712	0.55453	0.56200	0.56952	0.57709
4 1 2018	0.46037	0.46736	0.47440	0.48150	0.48866	0.49588	0.50315	0.51047	0.51785	0.52528	0.53276	0.54030	0.54789	0.55553	0.56322	0.57096
10 1 2018	0.46215	0.46901	0.47594	0.48293	0.48998	0.49709	0.50426	0.51149	0.51878	0.52612	0.53352	0.54098	0.54850	0.55607	0.56370	0.57138
4 1 2019	0.45358	0.46065	0.46778	0.47497	0.48221	0.48951	0.49687	0.50428	0.51175	0.51928	0.52686	0.53449	0.54218	0.54992	0.55771	0.56555
10 1 2019	0.45534	0.46228	0.46929	0.47637	0.48350	0.49070	0.49796	0.50529	0.51267	0.52011	0.52761	0.53517	0.54278	0.55045	0.55818	0.56596
4 1 2020	0.44713	0.45428	0.46148	0.46875	0.47608	0.48346	0.49091	0.49841	0.50597	0.51358	0.52126	0.52898	0.53676	0.54459	0.55248	0.56042
10 1 2020	0.44885	0.45588	0.46297	0.47013	0.47735	0.48464	0.49198	0.49940	0.50687	0.51440	0.52199	0.52965	0.53736	0.54512	0.55295	0.56083
4 1 2021	0.44099	0.44821	0.45550	0.46284	0.47025	0.47772	0.48525	0.49283	0.50048	0.50818	0.51594	0.52375	0.53162	0.53955	0.54753	0.55556
10 1 2021	0.44268	0.44979	0.45696	0.46419	0.47150	0.47887	0.48630	0.49380	0.50136	0.50898	0.51666	0.52441	0.53221	0.54007	0.54799	0.55597
4 1 2022	0.43515	0.44244	0.44980	0.45722	0.46471	0.47226	0.47986	0.48753	0.49526	0.50305	0.51089	0.51879	0.52675	0.53476	0.54283	0.55095
10 1 2022	0.43681	0.44399	0.45124	0.45855	0.46594	0.47339	0.48090	0.48848	0.49613	0.50384	0.51161	0.51944	0.52733	0.53528	0.54329	0.55136
4 1 2023	0.42958	0.43695	0.44438	0.45188	0.45944	0.46706	0.47475	0.48250	0.49031	0.49817	0.50610	0.51408	0.52213	0.53023	0.53838	0.54659
10 1 2023	0.43122	0.43847	0.44579	0.45318	0.46064	0.46817	0.47577	0.48343	0.49116	0.49895	0.50680	0.51472	0.52270	0.53074	0.53883	0.54699
4 1 2024	0.42429	0.43172	0.43922	0.44679	0.45443	0.46213	0.46989	0.47771	0.48560	0.49354	0.50155	0.50962	0.51774	0.52592	0.53416	0.54245
10 1 2024	0.42589	0.43321	0.44061	0.44807	0.45561	0.46321	0.47089	0.47863	0.48643	0.49431	0.50224	0.51024	0.51830	0.52643	0.53461	0.54285
4 1 2025	0.41924	0.42674	0.43431	0.44195	0.44966	0.45743	0.46526	0.47316	0.48112	0.48915	0.49723	0.50538	0.51358	0.52184	0.53016	0.53853
10 1 2025	0.42081	0.42820	0.43567	0.44321	0.45081	0.45849	0.46624	0.47406	0.48194	0.48990	0.49791	0.50599	0.51413	0.52234	0.53060	0.53893
4 1 2026	0.41443	0.42200	0.42964	0.43735	0.44512	0.45296	0.46087	0.46884	0.47687	0.48497	0.49313	0.50135	0.50963	0.51797	0.52637	0.53482
10 1 2026	0.41597	0.42343	0.43096	0.43857	0.44625	0.45400	0.46183	0.46972	0.47768	0.48570	0.49380	0.50196	0.51018	0.51846	0.52681	0.53521
4 1 2027	0.40985	0.41748	0.42518	0.43296	0.44080	0.44871	0.45668	0.46473	0.47283	0.48100	0.48924	0.49753	0.50588	0.51430	0.52277	0.53130
10 1 2027	0.41136	0.41888	0.42648	0.43416	0.44191	0.44973	0.45762	0.46559	0.47362	0.48172	0.48989	0.49812	0.50642	0.51478	0.52321	0.53169
4 1 2028	0.40548	0.41317	0.42094	0.42878	0.43669	0.44466	0.45270	0.46082	0.46899	0.47723	0.48554	0.49390	0.50233	0.51081	0.51936	0.52796

Maturing on or Before	5.500	5.625	5.750	5.875	6.000	6.125	6.250	6.375	6.500	6.625	6.750	6.875	7.000	7.125	7.250	7.375
10 1 1988	0.99643	0.99660	0.99676	0.99692	0.99709	0.99725	0.99741	0.99758	0.99774	0.99790	0.99807	0.99823	0.99839	0.99856	0.99872	0.99889
4 1 1989	0.98094	0.98168	0.98242	0.98315	0.98389	0.98463	0.98537	0.98611	0.98684	0.98758	0.98832	0.98906	0.98979	0.99053	0.99127	0.99201
10 1 1989	0.97880	0.97954	0.98027	0.98101	0.98175	0.98248	0.98322	0.98396	0.98470	0.98544	0.98618	0.98692	0.98766	0.98841	0.98915	0.98989
4 1 1990	0.95917	0.96044	0.96172	0.96300	0.96428	0.96556	0.96684	0.96812	0.96940	0.97068	0.97196	0.97325	0.97453	0.97581	0.97710	0.97838
10 1 1990	0.95801	0.95927	0.96054	0.96181	0.96309	0.96436	0.96564	0.96692	0.96820	0.96948	0.97076	0.97204	0.97333	0.97462	0.97591	0.97720
4 1 1991	0.93908	0.94086	0.94265	0.94443	0.94622	0.94801	0.94981	0.95160	0.95340	0.95519	0.95699	0.95879	0.96060	0.96240	0.96421	0.96601
10 1 1991	0.93740	0.93917	0.94094	0.94271	0.94449	0.94627	0.94805	0.94983	0.95162	0.95341	0.95521	0.95701	0.95881	0.96061	0.96242	0.96423
4 1 1992	0.91781	0.92006	0.92232	0.92458	0.92685	0.92912	0.93139	0.93366	0.93594	0.93822	0.94050	0.94279	0.94507	0.94736	0.94966	0.95196
10 1 1992	0.91567	0.91790	0.92014	0.92238	0.92462	0.92687	0.92912	0.93138	0.93364	0.93591	0.93818	0.94046	0.94274	0.94503	0.94732	0.94961
4 1 1993	0.89824	0.90094	0.90365	0.90636	0.90907	0.91179	0.91451	0.91724	0.91997	0.92271	0.92545	0.92819	0.93094	0.93370	0.93646	0.93922
10 1 1993	0.89568	0.89835	0.90102	0.90370	0.90639	0.90908	0.91178	0.91449	0.91720	0.91991	0.92264	0.92537	0.92811	0.93085	0.93360	0.93636
4 1 1994	0.87560	0.87870	0.88181	0.88492	0.88804	0.89117	0.89430	0.89744	0.90059	0.90374	0.90690	0.91006	0.91323	0.91641	0.91959	0.92278
10 1 1994	0.87162	0.87467	0.87773	0.88080	0.88388	0.88697	0.89007	0.89317	0.89628	0.89940	0.90253	0.90567	0.90881	0.91197	0.91513	0.91830
4 1 1995	0.85113	0.85459	0.85806	0.86154	0.86502	0.86852	0.87202	0.87553	0.87905	0.88258	0.88611	0.88965	0.89320	0.89676	0.90033	0.90390
10 1 1995	0.84797	0.85137	0.85479	0.85822	0.86166	0.86511	0.86857	0.87204	0.87552	0.87901	0.88252	0.88603	0.88955	0.89308	0.89662	0.90018
4 1 1996	0.83098	0.83479	0.83861	0.84244	0.84628	0.85013	0.85399	0.85786	0.86174	0.86563	0.86952	0.87343	0.87735	0.88128	0.88522	0.88917
10 1 1996	0.82683	0.83057	0.83433	0.83809	0.84187	0.84567	0.84947	0.85329	0.85712	0.86097	0.86482	0.86869	0.87257	0.87646	0.88037	0.88429
4 1 1997	0.80640	0.81051	0.81463	0.81875	0.82289	0.82704	0.83121	0.83538	0.83957	0.84377	0.84798	0.85220	0.85644	0.86068	0.86494	0.86921
10 1 1997	0.80665	0.81070	0.81477	0.81885	0.82295	0.82706	0.83119	0.83533	0.83949	0.84366	0.84785	0.85205	0.85626	0.86049	0.86473	0.86899
4 1 1998	0.79065	0.79507	0.79950	0.80394	0.80840	0.81288	0.81737	0.82187	0.82638	0.83091	0.83546	0.84001	0.84458	0.84917	0.85376	0.85838
10 1 1998	0.79089	0.79525	0.79963	0.80403	0.80845	0.81288	0.81733	0.82180	0.82628	0.83078	0.83530	0.83983	0.84438	0.84895	0.85353	0.85813
4 1 1999	0.77569	0.78041	0.78514	0.78988	0.79464	0.79942	0.80421	0.80902	0.81385	0.81869	0.82355	0.82842	0.83331	0.83821	0.84313	0.84807
10 1 1999	0.77593	0.78059	0.78526	0.78996	0.79468	0.79941	0.80417	0.80894	0.81373	0.81854	0.82338	0.82822	0.83309	0.83798	0.84288	0.84781
4 1 2000	0.76150	0.76649	0.77150	0.77653	0.78157	0.78664	0.79172	0.79682	0.80194	0.80708	0.81223	0.81740	0.82259	0.82780	0.83303	0.83827
10 1 2000	0.75275	0.75762	0.76251	0.76742	0.77235	0.77731	0.78228	0.78728	0.79229	0.79733	0.80239	0.80747	0.81257	0.81769	0.82283	0.82799
4 1 2001	0.73860	0.74379	0.74899	0.75421	0.75946	0.76472	0.77001	0.77531	0.78064	0.78598	0.79135	0.79673	0.80213	0.80756	0.81300	0.81846
10 1 2001	0.73891	0.74403	0.74918	0.75435	0.75954	0.76475	0.76999	0.77526	0.78054	0.78585	0.79118	0.79654	0.80192	0.80732	0.81274	0.81818
4 1 2002	0.72548	0.73090	0.73635	0.74182	0.74731	0.75282	0.75836	0.76392	0.76950	0.77510	0.78072	0.78637	0.79204	0.79772	0.80343	0.80916
10 1 2002	0.72579	0.73115	0.73653	0.74195	0.74739	0.75285	0.75834	0.76386	0.76940	0.77496	0.78056	0.78617	0.79181	0.79748	0.80317	0.80888
4 1 2003	0.71304	0.71869	0.72437	0.73007	0.73579	0.74154	0.74732	0.75311	0.75893	0.76478	0.77065	0.77654	0.78246	0.78840	0.79436	0.80035
10 1 2003	0.70844	0.71399	0.71956	0.72516	0.73079	0.73644	0.74213	0.74784	0.75358	0.75934	0.76513	0.77095	0.77680	0.78267	0.78857	0.79449
4 1 2004	0.69617	0.70199	0.70784	0.71372	0.71962	0.72555	0.73150	0.73748	0.74348	0.74951	0.75557	0.76165	0.76776	0.77389	0.78004	0.78622
10 1 2004	0.69652	0.70228	0.70806	0.71388	0.71972	0.72560	0.73150	0.73744	0.74340	0.74939	0.75542	0.76147	0.76754	0.77365	0.77979	0.78595
4 1 2005	0.68488	0.69090	0.69695	0.70303	0.70914	0.71527	0.72143	0.72763	0.73384	0.74009	0.74636	0.75266	0.75899	0.76534	0.77172	0.77813
10 1 2005	0.68523	0.69118	0.69717	0.70319	0.70924	0.71533	0.72144	0.72759	0.73376	0.73997	0.74621	0.75248	0.75878	0.76511	0.77147	0.77786
4 1 2006	0.67418	0.68039	0.68663	0.69290	0.69921	0.70554	0.71190	0.71829	0.72471	0.73116	0.73764	0.74415	0.75069	0.75725	0.76384	0.77046
10 1 2006	0.67453	0.68067	0.68685	0.69306	0.69931	0.70559	0.71191	0.71825	0.72463	0.73105	0.73749	0.74397	0.75048	0.75702	0.76359	0.77020
4 1 2007	0.66404	0.67043	0.67686	0.68331	0.68980	0.69632	0.70287	0.70945	0.71606	0.72271	0.72938	0.73609	0.74282	0.74959	0.75638	0.76321
10 1 2007	0.66439	0.67072	0.67708	0.68347	0.68991	0.69638	0.70288	0.70942	0.71599	0.72260	0.72924	0.73591	0.74262	0.74936	0.75614	0.76295
4 1 2008	0.65444	0.66100	0.66760	0.67423	0.68089	0.68759	0.69432	0.70108	0.70787	0.71470	0.72156	0.72845	0.73538	0.74293	0.74932	0.75634
10 1 2008	0.65479	0.66128	0.66782	0.67439	0.68100	0.68764	0.69433	0.70105	0.70780	0.71460	0.72142	0.72829	0.73519	0.74212	0.74909	0.75609
4 1 2009	0.64534	0.65207	0.65883	0.66562	0.67245	0.67931	0.68621	0.69315	0.70012	0.70712	0.71416	0.72123	0.72833	0.73547	0.74264	0.74984
10 1 2009	0.64569	0.65235	0.65905	0.66578	0.67256	0.87938	0.68623	0.69313	0.70006	0.70702	0.71403	0.72107	0.72815	0.73527	0.74242	0.74960

Maturing on or Before			5.500	5.625	5.750	5.875	6.000	6.125	6.250	6.375	6.500	6.625	6.750	6.875	7.000	7.125	7.250	7.375
4	1	2010	0.63672	0.64360	0.65052	0.65747	0.66446	0.67148	0.67855	0.68564	0.69278	0.69995	0.70715	0.71439	0.72167	0.72898	0.73632	0.74370
10	1	2010	0.63707	0.64388	0.65074	0.65764	0.66457	0.67155	0.67857	0.68563	0.69272	0.69986	0.70703	0.71425	0.72150	0.72878	0.73611	0.74347
4	1	2011	0.62856	0.63558	0.64265	0.64975	0.65689	0.66407	0.67128	0.67854	0.68583	0.69316	0.70052	0.70793	0.71536	0.72284	0.73035	0.73789
10	1	2011	0.62890	0.63586	0.64287	0.64992	0.65701	0.66414	0.67131	0.67853	0.68578	0.69308	0.70041	0.70779	0.71520	0.72266	0.73015	0.73768
4	1	2012	0.62082	0.62799	0.63519	0.64244	0.64972	0.65705	0.66441	0.67181	0.67926	0.68674	0.69425	0.70181	0.70940	0.71703	0.72470	0.73240
10	1	2012	0.61559	0.62262	0.62970	0.63682	0.64399	0.65120	0.65845	0.66574	0.67308	0.68046	0.68787	0.69533	0.70283	0.71037	0.71794	0.72556
4	1	2013	0.60783	0.61506	0.62233	0.62964	0.63700	0.64439	0.65183	0.65930	0.66681	0.67436	0.68196	0.68959	0.69725	0.70496	0.71270	0.72048
10	1	2013	0.60822	0.61538	0.62260	0.62985	0.63716	0.64450	0.65190	0.65933	0.66681	0.67433	0.68189	0.68949	0.69714	0.70482	0.71255	0.72031
4	1	2014	0.60085	0.60821	0.61561	0.62305	0.63053	0.63805	0.64562	0.65323	0.66087	0.66856	0.67629	0.68406	0.69186	0.69971	0.70759	0.71551
10	1	2014	0.60124	0.60853	0.61587	0.62326	0.63069	0.63817	0.64570	0.65327	0.66088	0.66854	0.67623	0.68398	0.69176	0.69959	0.70745	0.71538
4	1	2015	0.59425	0.60172	0.60924	0.61680	0.62441	0.63206	0.63975	0.64749	0.65526	0.66308	0.67094	0.67883	0.68677	0.69475	0.70276	0.71082
10	1	2015	0.59463	0.60204	0.60951	0.61702	0.62458	0.63218	0.63984	0.64753	0.65528	0.66306	0.67089	0.67877	0.68668	0.69464	0.70264	0.71069
4	1	2016	0.58799	0.59558	0.60321	0.61089	0.61862	0.62639	0.63420	0.64206	0.64996	0.65790	0.66588	0.67390	0.68197	0.69007	0.69821	0.70639
10	1	2016	0.58837	0.59590	0.60348	0.61111	0.61879	0.62652	0.63429	0.64211	0.64998	0.65789	0.66585	0.67385	0.68189	0.68998	0.69811	0.70628
4	1	2017	0.58436	0.59209	0.59986	0.60769	0.61556	0.62348	0.63144	0.63944	0.64749	0.65558	0.66372	0.67189	0.68011	0.68837	0.69666	0.70500
10	1	2017	0.58472	0.59239	0.60012	0.60790	0.61573	0.62360	0.63152	0.63950	0.64751	0.65558	0.66369	0.67184	0.68004	0.68828	0.69657	0.70490
4	1	2018	0.57875	0.58659	0.59447	0.60241	0.61039	0.61841	0.62649	0.63460	0.64277	0.65097	0.65922	0.66751	0.67584	0.68422	0.69263	0.70109
10	1	2018	0.57911	0.58689	0.59473	0.60262	0.61056	0.61855	0.62658	0.63467	0.64280	0.65098	0.65921	0.66748	0.67579	0.68415	0.69256	0.70100
4	1	2019	0.57344	0.58138	0.58937	0.59741	0.60549	0.61363	0.62181	0.63003	0.63830	0.64662	0.65497	0.66337	0.67182	0.68030	0.68883	0.69740
10	1	2019	0.57380	0.58169	0.58963	0.59762	0.60567	0.61376	0.62191	0.63010	0.63835	0.64664	0.65497	0.66336	0.67178	0.68026	0.68877	0.69733
4	1	2020	0.56841	0.57645	0.58454	0.59268	0.60086	0.60910	0.61738	0.62571	0.63408	0.64250	0.65097	0.65947	0.66802	0.67661	0.68525	0.69392
10	1	2020	0.56877	0.57676	0.58480	0.59290	0.60104	0.60924	0.61749	0.62579	0.63414	0.64254	0.65098	0.65947	0.66800	0.67658	0.68520	0.69387
4	1	2021	0.56364	0.57178	0.57996	0.58820	0.59648	0.60482	0.61320	0.62162	0.63010	0.63862	0.64718	0.65579	0.66444	0.67313	0.68187	0.69064
10	1	2021	0.56400	0.57209	0.58023	0.58842	0.59667	0.60497	0.61332	0.62172	0.63017	0.63866	0.64721	0.65580	0.66444	0.67312	0.68184	0.69061
4	1	2022	0.55913	0.56735	0.57563	0.58396	0.59234	0.60077	0.60924	0.61777	0.62634	0.63495	0.64361	0.65232	0.66106	0.66985	0.67869	0.68756
10	1	2022	0.55948	0.56766	0.57590	0.58419	0.59253	0.60093	0.60937	0.61787	0.62641	0.63501	0.64365	0.65234	0.66107	0.66985	0.67868	0.68755
4	1	2023	0.55485	0.56317	0.57153	0.57995	0.58842	0.59694	0.60551	0.61412	0.62278	0.63149	0.64024	0.64904	0.65788	0.66676	0.67569	0.68465
10	1	2023	0.55521	0.56348	0.57180	0.58018	0.58862	0.59710	0.60564	0.61423	0.62287	0.63156	0.64029	0.64908	0.65791	0.66678	0.67570	0.68466
4	1	2024	0.55080	0.55920	0.56765	0.57616	0.58471	0.59332	0.60197	0.61068	0.61943	0.62822	0.63706	0.64595	0.65488	0.66385	0.67287	0.68192
10	1	2024	0.55115	0.55951	0.56792	0.57639	0.58492	0.59349	0.60212	0.61080	0.61953	0.62830	0.63713	0.64600	0.65492	0.66388	0.67289	0.68194
4	1	2025	0.54696	0.55545	0.56398	0.57257	0.58121	0.58990	0.59864	0.60742	0.61626	0.62514	0.63407	0.64304	0.65205	0.66111	0.67021	0.67935
10	1	2025	0.54731	0.55576	0.56425	0.57281	0.58142	0.59008	0.59879	0.60755	0.61637	0.62523	0.63414	0.64310	0.65211	0.66116	0.67025	0.67939
4	1	2026	0.54333	0.55189	0.56051	0.56917	0.57789	0.58666	0.59548	0.60435	0.61327	0.62223	0.63124	0.64029	0.64939	0.65853	0.66771	0.67693
10	1	2026	0.54368	0.55220	0.56078	0.56942	0.57811	0.58685	0.59565	0.60449	0.61339	0.62234	0.63133	0.64037	0.64946	0.65859	0.66777	0.67699
4	1	2027	0.53988	0.54852	0.55722	0.56596	0.57476	0.58361	0.59251	0.60145	0.61045	0.61949	0.62857	0.63770	0.64688	0.65610	0.66535	0.67465
10	1	2027	0.54023	0.54883	0.55749	0.56621	0.57498	0.58380	0.59267	0.60160	0.61058	0.61960	0.62868	0.63780	0.64696	0.65617	0.66543	0.67473
4	1	2028	0.53662	0.54533	0.55410	0.56292	0.57180	0.58072	0.58969	0.59872	0.60778	0.61690	0.62606	0.63527	0.64452	0.65381	0.66314	0.67251

Maturing on or Before	7.500	7.625	7.750	7.875	8.000	8.125	8.250	8.375	8.500	8.625	8.750	8.875	9.000	9.125	9.250	9.375
10 1 1988	0.99905	0.99921	0.99938	0.99954	0.99970	0.99987	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
4 1 1989	0.99274	0.99348	0.99422	0.99496	0.99570	0.99643	0.99717	0.99791	0.99865	0.99938	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
10 1 1989	0.99064	0.99138	0.99213	0.99288	0.99362	0.99437	0.99512	0.99587	0.99662	0.99737	0.99812	0.99887	0.99963	1.00000	1.00000	1.00000
4 1 1990	0.97967	0.98096	0.98224	0.98353	0.98482	0.98611	0.98740	0.98869	0.98998	0.99127	0.99257	0.99386	0.99515	0.99645	0.99774	0.99904
10 1 1990	0.97849	0.97979	0.98108	0.98238	0.98368	0.98498	0.98629	0.98759	0.98890	0.99021	0.99152	0.99283	0.99414	0.99545	0.99677	0.99809
4 1 1991	0.96782	0.96963	0.97144	0.97326	0.97507	0.97689	0.97871	0.98053	0.98235	0.98417	0.98600	0.98782	0.98965	0.99148	0.99331	0.99515
10 1 1991	0.96604	0.96786	0.96968	0.97150	0.97332	0.97515	0.97698	0.97881	0.98065	0.98249	0.98433	0.98618	0.98803	0.98988	0.99173	0.99359
4 1 1992	0.95426	0.95656	0.95886	0.96117	0.96348	0.96580	0.96811	0.97043	0.97276	0.97508	0.97741	0.97974	0.98207	0.98441	0.98675	0.98909
10 1 1992	0.95191	0.95422	0.95652	0.95884	0.96116	0.96348	0.96580	0.96814	0.97047	0.97281	0.97516	0.97750	0.97986	0.98222	0.98458	0.98694
4 1 1993	0.94199	0.94476	0.94753	0.95031	0.95310	0.95589	0.95868	0.96148	0.96428	0.96708	0.96989	0.97271	0.97553	0.97835	0.98118	0.98401
10 1 1993	0.93912	0.94189	0.94466	0.94745	0.95023	0.95303	0.95583	0.95863	0.96145	0.96426	0.96709	0.96992	0.97276	0.97560	0.97845	0.98131
4 1 1994	0.92597	0.92917	0.93238	0.93559	0.93881	0.94203	0.94526	0.94850	0.95174	0.95499	0.95824	0.96150	0.96476	0.96803	0.97131	0.97459
10 1 1994	0.92148	0.92466	0.92786	0.93106	0.93427	0.93749	0.94072	0.94395	0.94719	0.95044	0.95370	0.95697	0.96024	0.96353	0.96682	0.97012
4 1 1995	0.90748	0.91107	0.91467	0.91827	0.92188	0.92550	0.92913	0.93277	0.93641	0.94006	0.94372	0.94738	0.95105	0.95473	0.95842	0.96212
10 1 1995	0.90374	0.90731	0.91090	0.91449	0.91809	0.92170	0.92533	0.92896	0.93260	0.93626	0.93992	0.94359	0.94727	0.95096	0.95467	0.95838
4 1 1996	0.89312	0.89709	0.90107	0.90505	0.90905	0.91305	0.91707	0.92109	0.92513	0.92917	0.93322	0.93728	0.94135	0.94543	0.94952	0.95362
10 1 1996	0.88821	0.89216	0.89611	0.90007	0.90405	0.90804	0.91204	0.91605	0.92008	0.92412	0.92816	0.93222	0.93630	0.94038	0.94447	0.94858
4 1 1997	0.87349	0.87778	0.88208	0.88639	0.89072	0.89506	0.89940	0.90376	0.90813	0.91251	0.91691	0.92131	0.92573	0.93015	0.93459	0.93904
10 1 1997	0.87326	0.87755	0.88185	0.88616	0.89049	0.89483	0.89919	0.90356	0.90794	0.91234	0.91675	0.92117	0.92561	0.93006	0.93453	0.93901
4 1 1998	0.86300	0.86764	0.87229	0.87695	0.88163	0.88632	0.89103	0.89574	0.90047	0.90522	0.90997	0.91474	0.91953	0.92432	0.92913	0.93395
10 1 1998	0.86275	0.86738	0.87203	0.87669	0.88137	0.88607	0.89078	0.89551	0.90026	0.90502	0.90979	0.91458	0.91939	0.92421	0.92905	0.93390
4 1 1999	0.85302	0.85799	0.86297	0.86797	0.87298	0.87801	0.88305	0.88811	0.89318	0.89827	0.90337	0.90849	0.91362	0.91877	0.92393	0.92910
10 1 1999	0.85275	0.85771	0.86269	0.86769	0.87270	0.87773	0.88278	0.88785	0.89294	0.89804	0.90317	0.90830	0.91346	0.91864	0.92383	0.92904
4 1 2000	0.84353	0.84881	0.85410	0.85942	0.86475	0.87009	0.87546	0.88084	0.88624	0.89165	0.89708	0.90253	0.90799	0.91348	0.91897	0.92449
10 1 2000	0.83317	0.83837	0.84359	0.84883	0.85410	0.85938	0.86468	0.87000	0.87534	0.88070	0.88608	0.89147	0.89689	0.90233	0.90778	0.91326
4 1 2001	0.82394	0.82944	0.83496	0.84050	0.84605	0.85163	0.85722	0.86283	0.86847	0.87411	0.87978	0.88547	0.89117	0.89690	0.90264	0.90839
10 1 2001	0.82365	0.82914	0.83465	0.84018	0.84574	0.85132	0.85692	0.86254	0.86818	0.87384	0.87952	0.88523	0.89095	0.89670	0.90247	0.90826
4 1 2002	0.81492	0.82069	0.82648	0.83230	0.83813	0.84399	0.84986	0.85576	0.86168	0.86761	0.87357	0.87955	0.88554	0.89156	0.89760	0.90365
10 1 2002	0.81462	0.82038	0.82617	0.83198	0.83781	0.84367	0.84955	0.85546	0.86138	0.86733	0.87331	0.87930	0.88532	0.89136	0.89743	0.90351
4 1 2003	0.80635	0.81239	0.81844	0.82452	0.83062	C.83674	0.84288	0.84905	0.85524	0.86145	0.86768	0.87393	0.88020	0.88650	0.89282	0.89916
10 1 2003	0.80044	0.80642	0.81242	0.81844	0.82450	0.83057	0.83668	0.84280	0.84896	0.85513	0.86133	0.86756	0.87381	0.88008	0.88638	0.89270
4 1 2004	0.79243	0.79866	0.80491	0.81119	0.81749	0.82382	0.83017	0.83654	0.84294	0.84936	0.85580	0.86227	0.86876	0.87527	0.88180	0.88836
10 1 2004	0.79214	0.79836	0.80460	0.81087	0.81717	0.82350	0.82985	0.83623	0.84264	0.84907	0.85553	0.86201	0.86852	0.87505	0.88161	0.88820
4 1 2005	0.78456	0.79102	0.79751	0.80402	0.81055	0.81712	0.82370	0.83032	0.83695	0.84361	0.85030	0.85701	0.86375	0.87051	0.87729	0.88410
10 1 2005	0.78428	0.79072	0.79720	0.80371	0.81024	0.81680	0.82339	0.83001	0.83666	0.84333	0.85003	0.85676	0.86352	0.87030	0.87711	0.88394
4 1 2006	0.77711	0.78379	0.79050	0.79723	0.80399	0.81077	0.81758	0.82442	0.83129	0.83818	0.84510	0.85204	0.85901	0.86600	0.87302	0.88007
10 1 2006	0.77683	0.78350	0.79019	0.79692	0.80368	0.81046	0.81728	0.82413	0.83100	0.83791	0.84484	0.85180	0.85879	0.86581	0.87285	0.87992
4 1 2007	0.77006	0.77695	0.78386	0.79080	0.79777	0.80477	0.81179	0.81885	0.82593	0.83304	0.84017	0.84734	0.85453	0.86174	0.86899	0.87626
10 1 2007	0.76979	0.77666	0.78357	0.79050	0.79747	0.80447	0.81150	0.81856	0.82565	0.83278	0.83993	0.84711	0.85432	0.86156	0.86883	0.87612
4 1 2008	0.76339	0.77047	0.77758	0.78472	0.79189	0.79909	0.80632	0.81358	0.82086	0.82818	0.83552	0.84289	0.85029	0.85772	0.86518	0.87266
10 1 2008	0.76313	0.77020	0.77730	0.78444	0.79160	0.79881	0.80604	0.81331	0.82060	0.82793	0.83529	0.84268	0.85010	0.85755	0.86503	0.87254
4 1 2009	0.75708	0.76434	0.77164	0.77897	0.78633	0.79372	0.80114	0.80860	0.81608	0.82359	0.83113	0.83870	0.84630	0.85392	0.86158	0.86926
10 1 2009	0.75683	0.76408	0.77137	0.77870	0.78606	0.79345	0.80088	0.80834	0.81583	0.82336	0.83091	0.83850	0.84612	0.85377	0.86145	0.86916

Maturing on or Before	7.500	7.625	7.750	7.875	8.000	8.125	8.250	8.375	8.500	8.625	8.750	8.875	9.000	9.125	9.250	9.375
4 1 2010	0.75111	0.75855	0.76603	0.77354	0.78108	0.78865	0.79626	0.80389	0.81156	0.81925	0.82698	0.83474	0.84253	0.85034	0.85819	0.86606
10 1 2010	0.75087	0.75831	0.76578	0.77328	0.78082	0.78840	0.79601	0.80365	0.81133	0.81904	0.82678	0.83456	0.84237	0.85020	0.85808	0.86598
4 1 2011	0.74547	0.75308	0.76073	0.76840	0.77612	0.78386	0.79164	0.79945	0.80729	0.81517	0.82307	0.83100	0.83897	0.84696	0.85499	0.86304
10 1 2011	0.74524	0.75285	0.76049	0.76817	0.77588	0.78363	0.79141	0.79923	0.80708	0.81497	0.82289	0.83084	0.83883	0.84685	0.85490	0.86298
4 1 2012	0.74014	0.74791	0.75572	0.76356	0.77143	0.77934	0.78729	0.79526	0.80327	0.81131	0.81938	0.82748	0.83562	0.84378	0.85198	0.86020
10 1 2012	0.73321	0.74090	0.74863	0.75640	0.76420	0.77204	0.77991	0.78782	0.79576	0.80374	0.81175	0.81980	0.82788	0.83599	0.84413	0.85230
4 1 2013	0.72829	0.73614	0.74403	0.75195	0.75990	0.76789	0.77591	0.78397	0.79206	0.80018	0.80833	0.81652	0.82474	0.83298	0.84126	0.84957
10 1 2013	0.72811	0.73596	0.74384	0.75175	0.75971	0.76770	0.77573	0.78379	0.79189	0.80002	0.80819	0.81639	0.82463	0.83290	0.84120	0.84953
4 1 2014	0.72346	0.73146	0.73949	0.74755	0.75565	0.76378	0.77195	0.78016	0.78839	0.79666	0.80496	0.81329	0.82166	0.83006	0.83848	0.84694
10 1 2014	0.72330	0.73129	0.73931	0.74738	0.75548	0.76361	0.77179	0.78000	0.78824	0.79652	0.80484	0.81319	0.82157	0.82999	0.83844	0.84692
4 1 2015	0.71891	0.72704	0.73520	0.74340	0.75164	0.75991	0.76822	0.77656	0.78494	0.79335	0.80179	0.81026	0.81877	0.82731	0.83587	0.84447
10 1 2015	0.71877	0.72689	0.73505	0.74325	0.75149	0.75976	0.76808	0.77643	0.78481	0.79323	0.80169	0.81018	0.81871	0.82726	0.83585	0.84448
4 1 2016	0.71461	0.72287	0.73117	0.73950	0.74787	0.75627	0.76471	0.77318	0.78169	0.79023	0.79881	0.80741	0.81605	0.82472	0.83342	0.84216
10 1 2016	0.71449	0.72274	0.73103	0.73937	0.74773	0.75614	0.76459	0.77307	0.78159	0.79014	0.79873	0.80735	0.81601	0.82470	0.83343	0.84218
4 1 2017	0.71338	0.72179	0.73024	0.73873	0.74726	0.75582	0.76442	0.77305	0.78172	0.79042	0.79916	0.80793	0.81673	0.82556	0.83442	0.84332
10 1 2017	0.71327	0.72168	0.73013	0.73862	0.74715	0.75571	0.76432	0.77296	0.78164	0.79036	0.79911	0.80789	0.81671	0.82556	0.83445	0.84337
4 1 2018	0.70958	0.71811	0.72668	0.73529	0.74394	0.75262	0.76134	0.77009	0.77888	0.78770	0.79656	0.80544	0.81436	0.82332	0.83230	0.84131
10 1 2018	0.70949	0.71802	0.72659	0.73520	0.74385	0.75253	0.76126	0.77002	0.77882	0.78766	0.79653	0.80543	0.81437	0.82334	0.83235	0.84139
4 1 2019	0.70600	0.71465	0.72333	0.73205	0.74081	0.74961	0.75844	0.76731	0.77621	0.78514	0.79411	0.80311	0.81215	0.82121	0.83031	0.83944
10 1 2019	0.70593	0.71457	0.72326	0.73198	0.74074	0.74954	0.75838	0.76726	0.77617	0.78512	0.79411	0.80312	0.81218	0.82126	0.83038	0.83953
4 1 2020	0.70263	0.71139	0.72018	0.72901	0.73787	0.74678	0.75572	0.76469	0.77370	0.78274	0.79182	0.80093	0.81007	0.81924	0.82845	0.83768
10 1 2020	0.70258	0.71133	0.72012	0.72895	0.73782	0.74673	0.75568	0.76467	0.77369	0.78274	0.79184	0.80096	0.81012	0.81931	0.82854	0.83780
4 1 2021	0.69946	0.70831	0.71721	0.72614	0.73511	0.74412	0.75316	0.76223	0.77135	0.78049	0.78967	0.79888	0.80812	0.81740	0.82670	0.83604
10 1 2021	0.69943	0.70828	0.71717	0.72611	0.73508	0.74409	0.75314	0.76223	0.77135	0.78051	0.78971	0.79894	0.80820	0.81749	0.82682	0.83617
4 1 2022	0.69647	0.70542	0.71442	0.72345	0.73251	0.74162	0.75075	0.75993	0.76914	0.77838	0.78765	0.79696	0.80630	0.81567	0.82507	0.83450
10 1 2022	0.69646	0.70541	0.71440	0.72343	0.73251	0.74162	0.75076	0.75995	0.76917	0.77842	0.78771	0.79704	0.80639	0.81578	0.82520	0.83466
4 1 2023	0.69366	0.70271	0.71179	0.72091	0.73007	0.73927	0.74850	0.75777	0.76707	0.77640	0.78577	0.79516	0.80459	0.81405	0.82354	0.83306
10 1 2023	0.69366	0.70271	0.71180	0.72092	0.73009	0.73929	0.74853	0.75781	0.76712	0.77647	0.78585	0.79526	0.80471	0.81419	0.82370	0.83324
4 1 2024	0.69102	0.70015	0.70932	0.71853	0.72778	0.73707	0.74638	0.75574	0.76513	0.77455	0.78400	0.79348	0.80300	0.81254	0.82212	0.83172
10 1 2024	0.69104	0.70017	0.70935	0.71856	0.72782	0.73711	0.74643	0.75580	0.76520	0.77463	0.78410	0.79360	0.80313	0.81270	0.82229	0.83192
4 1 2025	0.68853	0.69775	0.70700	0.71630	0.72563	0.73500	0.74440	0.75384	0.76331	0.77281	0.78234	0.79191	0.80151	0.81113	0.82079	0.83047
10 1 2025	0.68857	0.69779	0.70705	0.71635	0.72568	0.73506	0.74447	0.75392	0.76340	0.77292	0.78247	0.79205	0.80166	0.81130	0.82098	0.83068
4 1 2026	0.68619	0.69549	0.70483	0.71420	0.72361	0.73306	0.74254	0.75206	0.76160	0.77119	0.78080	0.79044	0.80011	0.80981	0.81954	0.82930
10 1 2026	0.68625	0.69555	0.70489	0.71427	0.72369	0.73314	0.74263	0.75216	0.76172	0.77131	0.78094	0.79060	0.80029	0.81000	0.81975	0.82953
4 1 2027	0.68399	0.69337	0.70278	0.71223	0.72172	0.73124	0.74080	0.75039	0.76001	0.76966	0.77935	0.78906	0.79881	0.80858	0.81838	0.82821
10 1 2027	0.68406	0.69344	0.70286	0.71232	0.72181	0.73134	0.74091	0.75051	0.76014	0.76981	0.77951	0.78924	0.79900	0.80879	0.81861	0.82846
4 1 2028	0.68192	0.69137	0.70086	0.71039	0.71995	0.72954	0.73917	0.74883	0.75852	0.76824	0.77800	0.78778	0.79759	0.80743	0.81730	0.82719

Maturing on or Before	9.500	9.625	9.750	10.000	10.500	10.625	10.750	11.375	11.625	12.250	12.375
10 1 1988	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
4 1 1989	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
10 1 1989	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
4 1 1990	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
10 1 1990	0.99941	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
4 1 1991	0.99698	0.99881	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
10 1 1991	0.99545	0.99731	0.99918	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
4 1 1992	0.99144	0.99378	0.99613	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
10 1 1992	0.98932	0.99169	0.99407	0.99884	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
4 1 1993	0.98684	0.98968	0.99253	0.99823	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
10 1 1993	0.98417	0.98704	0.98991	0.99567	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
4 1 1994	0.97788	0.98117	0.98447	0.99109	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
10 1 1994	0.97342	0.97674	0.98006	0.98672	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
4 1 1995	0.96582	0.96953	0.97325	0.98070	0.99570	0.99947	1.00000	1.00000	1.00000	1.00000	1.00000
10 1 1995	0.96210	0.96583	0.96957	0.97708	0.99221	0.99601	0.99983	1.00000	1.00000	1.00000	1.00000
4 1 1996	0.95773	0.96184	0.96597	0.97425	0.99092	0.99510	0.99930	1.00000	1.00000	1.00000	1.00000
10 1 1996	0.95270	0.95683	0.96097	0.96929	0.98605	0.99027	0.99451	1.00000	1.00000	1.00000	1.00000
4 1 1997	0.94349	0.94796	0.95244	0.96144	0.97955	0.98411	0.98867	1.00000	1.00000	1.00000	1.00000
10 1 1997	0.94350	0.94800	0.95252	0.96160	0.97991	0.98452	0.98915	1.00000	1.00000	1.00000	1.00000
4 1 1998	0.93878	0.94363	0.94849	0.95824	0.97790	0.98285	0.98781	1.00000	1.00000	1.00000	1.00000
10 1 1998	0.93877	0.94365	0.94855	0.95839	0.97826	0.98326	0.98828	1.00000	1.00000	1.00000	1.00000
4 1 1999	0.93429	0.93950	0.94472	0.95520	0.97633	0.98165	0.98698	1.00000	1.00000	1.00000	1.00000
10 1 1999	0.93426	0.93951	0.94477	0.95534	0.97668	0.98206	0.98745	1.00000	1.00000	1.00000	1.00000
4 1 2000	0.93002	0.93556	0.94113	0.95230	0.97484	0.98051	0.98620	1.00000	1.00000	1.00000	1.00000
10 1 2000	0.91875	0.92426	0.92979	0.94091	0.96336	0.96902	0.97469	1.00000	1.00000	1.00000	1.00000
4 1 2001	0.91417	0.91996	0.92578	0.93745	0.96101	0.96694	0.97289	1.00000	1.00000	1.00000	1.00000
10 1 2001	0.91407	0.91989	0.92574	0.93750	0.96126	0.96724	0.97325	1.00000	1.00000	1.00000	1.00000
4 1 2002	0.90973	0.91582	0.92194	0.93422	0.95902	0.96526	0.97152	1.00000	1.00000	1.00000	1.00000
10 1 2002	0.90962	0.91575	0.92190	0.93427	0.95926	0.96556	0.97188	1.00000	1.00000	1.00000	1.00000
4 1 2003	0.90552	0.91189	0.91830	0.93116	0.95713	0.96367	0.97023	1.00000	1.00000	1.00000	1.00000
10 1 2003	0.89904	0.90541	0.91180	0.92465	0.95062	0.95717	0.96374	0.99691	1.00000	1.00000	1.00000
4 1 2004	0.89494	0.90154	0.90816	0.92147	0.94835	0.95512	0.96191	0.99618	1.00000	1.00000	1.00000
10 1 2004	0.89481	0.90144	0.90810	0.92149	0.94856	0.95538	0.96223	0.99681	1.00000	1.00000	1.00000
4 1 2005	0.89093	0.89778	0.90466	0.91848	0.94639	0.95343	0.96049	0.99609	1.00000	1.00000	1.00000
10 1 2005	0.89081	0.89769	0.90461	0.91851	0.94661	0.95370	0.96081	0.99671	1.00000	1.00000	1.00000
4 1 2006	0.88713	0.89423	0.90134	0.91565	0.94455	0.95183	0.95914	0.99600	1.00000	1.00000	1.00000
10 1 2006	0.88702	0.89415	0.90130	0.91569	0.94477	0.95211	0.95947	0.99663	1.00000	1.00000	1.00000
4 1 2007	0.88355	0.89087	0.89822	0.91298	0.94281	0.95033	0.95787	0.99591	1.00000	1.00000	1.00000
10 1 2007	0.88345	0.89080	0.89818	0.91303	0.94304	0.95061	0.95820	0.99654	1.00000	1.00000	1.00000
4 1 2008	0.88017	0.88770	0.89526	0.91046	0.94117	0.94891	0.95667	0.99584	1.00000	1.00000	1.00000
10 1 2008	0.88008	0.88765	0.89524	0.91052	0.94141	0.94919	0.95701	0.99647	1.00000	1.00000	1.00000
4 1 2009	0.87697	0.88471	0.89248	0.90809	0.93962	0.94757	0.95554	0.99576	1.00000	1.00000	1.00000
10 1 2009	0.87690	0.88467	0.89247	0.90816	0.93987	0.94787	0.95589	0.99639	1.00000	1.00000	1.00000

Maturing on or Before	9.500	9.625	9.750	10.000	10.500	10.625	10.750	11.375	11.625	12.250	12.375
4 1 2010	0.87396	0.88189	0.88985	0.90585	0.93816	0.94631	0.95448	0.99569	1.00000	1.00000	1.00000
10 1 2010	0.87391	0.88187	0.88986	0.90594	0.93843	0.94662	0.95484	0.99632	1.00000	1.00000	1.00000
4 1 2011	0.87113	0.87924	0.88738	0.90374	0.93680	0.94513	0.95348	0.99563	1.00000	1.00000	1.00000
10 1 2011	0.87109	0.87923	0.88741	0.90385	0.93707	0.94544	0.95385	0.99626	1.00000	1.00000	1.00000
4 1 2012	0.86846	0.87674	0.88505	0.90176	0.93551	0.94401	0.95254	0.99557	1.00000	1.00000	1.00000
10 1 2012	0.86051	0.86875	0.87701	0.89364	0.92723	0.93570	0.94419	0.98707	1.00000	1.00000	1.00000
4 1 2013	0.85790	0.86627	0.87467	0.89154	0.92562	0.93420	0.94282	0.98625	1.00000	1.00000	1.00000
10 1 2013	0.85789	0.86629	0.87471	0.89166	0.92589	0.93452	0.94317	0.98684	1.00000	1.00000	1.00000
4 1 2014	0.85543	0.86394	0.87249	0.88967	0.92435	0.93309	0.94185	0.98604	1.00000	1.00000	1.00000
10 1 2014	0.85544	0.86398	0.87256	0.88980	0.92463	0.93341	0.94221	0.98663	1.00000	1.00000	1.00000
4 1 2015	0.85310	0.86176	0.87045	0.88791	0.92316	0.93204	0.94094	0.98584	1.00000	1.00000	1.00000
10 1 2015	0.85313	0.86182	0.87054	0.88806	0.92346	0.93238	0.94132	0.98644	1.00000	1.00000	1.00000
4 1 2016	0.85092	0.85971	0.86853	0.88626	0.92205	0.93106	0.94010	0.98565	1.00000	1.00000	1.00000
10 1 2016	0.85097	0.85979	0.86864	0.88643	0.92236	0.93141	0.94049	0.98626	1.00000	1.00000	1.00000
4 1 2017	0.85224	0.86119	0.87018	0.88823	0.92466	0.93384	0.94304	0.98940	1.00000	1.00000	1.00000
10 1 2017	0.85232	0.86130	0.87031	0.88842	0.92500	0.93421	0.94344	0.99001	1.00000	1.00000	1.00000
4 1 2018	0.85036	0.85943	0.86853	0.88682	0.92373	0.93302	0.94234	0.98928	1.00000	1.00000	1.00000
10 1 2018	0.85046	0.85956	0.86869	0.88704	0.92408	0.93341	0.94276	0.98990	1.00000	1.00000	1.00000
4 1 2019	0.84859	0.85778	0.86700	0.88551	0.92286	0.93227	0.94169	0.98918	1.00000	1.00000	1.00000
10 1 2019	0.84871	0.85793	0.86717	0.88574	0.92322	0.93266	0.94212	0.98980	1.00000	1.00000	1.00000
4 1 2020	0.84694	0.85624	0.86556	0.88428	0.92205	0.93156	0.94109	0.98908	1.00000	1.00000	1.00000
10 1 2020	0.84708	0.85640	0.86575	0.88453	0.92243	0.93196	0.94153	0.98970	1.00000	1.00000	1.00000
4 1 2021	0.84540	0.85479	0.86421	0.88314	0.92130	0.93090	0.94053	0.98899	1.00000	1.00000	1.00000
10 1 2021	0.84556	0.85498	0.86442	0.88340	0.92168	0.93132	0.94098	0.98961	1.00000	1.00000	1.00000
4 1 2022	0.84396	0.85344	0.86296	0.88207	0.92059	0.93029	0.94000	0.98890	1.00000	1.00000	1.00000
10 1 2022	0.84414	0.85365	0.86319	0.88235	0.92099	0.93071	0.94046	0.98953	1.00000	1.00000	1.00000
4 1 2023	0.84261	0.85219	0.86179	0.88107	0.91994	0.92972	0.93951	0.98882	1.00000	1.00000	1.00000
10 1 2023	0.84281	0.85241	0.86203	0.88137	0.92035	0.93015	0.93998	0.98945	1.00000	1.00000	1.00000
4 1 2024	0.84135	0.85101	0.86070	0.88014	0.91933	0.92919	0.93906	0.98875	1.00000	1.00000	1.00000
10 1 2024	0.84157	0.85125	0.86096	0.88046	0.91975	0.92963	0.93954	0.98938	1.00000	1.00000	1.00000
4 1 2025	0.84018	0.84991	0.85968	0.87928	0.91877	0.92869	0.93864	0.98868	1.00000	1.00000	1.00000
10 1 2025	0.84041	0.85017	0.85996	0.87961	0.91920	0.92915	0.93913	0.98932	1.00000	1.00000	1.00000
4 1 2026	0.83908	0.84889	0.85873	0.87847	0.91824	0.92824	0.93825	0.98862	1.00000	1.00000	1.00000
10 1 2026	0.83933	0.84917	0.85902	0.87881	0.91868	0.92870	0.93875	0.98926	1.00000	1.00000	1.00000
4 1 2027	0.83806	0.84794	0.85784	0.87772	0.91775	0.92781	0.93789	0.98856	1.00000	1.00000	1.00000
10 1 2027	0.83833	0.84823	0.85815	0.87808	0.91820	0.92829	0.93839	0.98920	1.00000	1.00000	1.00000
4 1 2028	0.83711	0.84705	0.85702	0.87703	0.91730	0.92742	0.93756	0.98851	1.00000	1.00000	1.00000

FARMERS HOME ADMINISTRATION 1988 DISCOUNT PURCHASE PROGRAM
Purchase Price of Community Program Loans
For borrowers using NON TAX EXEMPT sources of financing and paying interest SEMIANNUALLY, QUARTERLY, OR MONTHLY
Closing on or after MAY 10, 1988 but not after JUNE 9, 1988

Maturing on or Before			3.500	3.625	3.750	3.875	4.000	4.125	4.250	4.375	4.500	4.625	4.750	4.875	5.000	5.125	5.250	5.375
10	1	1988	0.99400	0.99417	0.99434	0.99451	0.99468	0.99485	0.99502	0.99519	0.99536	0.99554	0.99571	0.99588	0.99605	0.99622	0.99639	0.99656
4	1	1989	0.98139	0.98186	0.98232	0.98279	0.98325	0.98372	0.98418	0.98465	0.98512	0.98558	0.98605	0.98652	0.98699	0.98745	0.98792	0.98839
10	1	1989	0.96767	0.96842	0.96917	0.96992	0.97067	0.97142	0.97218	0.97293	0.97368	0.97444	0.97519	0.97594	0.97670	0.97745	0.97821	0.97897
4	1	1990	0.95261	0.95364	0.95466	0.95568	0.95671	0.95773	0.95876	0.95978	0.96081	0.96184	0.96287	0.96390	0.96493	0.96597	0.96700	0.96803
10	1	1990	0.93882	0.94010	0.94139	0.94268	0.94397	0.94526	0.94655	0.94784	0.94914	0.95044	0.95173	0.95303	0.95433	0.95564	0.95694	0.95824
4	1	1991	0.92484	0.92637	0.92792	0.92946	0.93100	0.93255	0.93410	0.93565	0.93720	0.93876	0.94031	0.94187	0.94343	0.94500	0.94656	0.94813
10	1	1991	0.91070	0.91248	0.91427	0.91606	0.91785	0.91964	0.92144	0.92323	0.92503	0.92684	0.92864	0.93045	0.93226	0.93408	0.93589	0.93771
4	1	1992	0.89644	0.89845	0.90047	0.90250	0.90452	0.90655	0.90858	0.91062	0.91266	0.91470	0.91674	0.91879	0.92085	0.92290	0.92496	0.92702
10	1	1992	0.88208	0.88432	0.88656	0.88880	0.89105	0.89331	0.89557	0.89783	0.90010	0.90237	0.90465	0.90692	0.90921	0.91150	0.91379	0.91608
4	1	1993	0.86994	0.87240	0.87486	0.87733	0.87981	0.88228	0.88477	0.88726	0.88975	0.89225	0.89475	0.89726	0.89977	0.90229	0.90482	0.90734
10	1	1993	0.85563	0.85829	0.86096	0.86363	0.86631	0.86900	0.87169	0.87439	0.87709	0.87980	0.88251	0.88524	0.88796	0.89070	0.89343	0.89618
4	1	1994	0.84127	0.84413	0.84699	0.84986	0.85274	0.85562	0.85851	0.86141	0.86431	0.86722	0.87014	0.87307	0.87600	0.87894	0.88188	0.88483
10	1	1994	0.82589	0.82893	0.83197	0.83503	0.83809	0.84115	0.84423	0.84731	0.85040	0.85350	0.85661	0.85972	0.86284	0.86597	0.86911	0.87226
4	1	1995	0.81148	0.81469	0.81791	0.82113	0.82437	0.82762	0.83087	0.83414	0.83741	0.84069	0.84398	0.84728	0.85058	0.85390	0.85723	0.86056
10	1	1995	0.79709	0.80047	0.80385	0.80725	0.81065	0.81407	0.81749	0.82092	0.82437	0.82782	0.83129	0.83476	0.83824	0.84174	0.84524	0.84875
4	1	1996	0.78593	0.78948	0.79304	0.79660	0.80018	0.80377	0.80737	0.81099	0.81461	0.81824	0.82189	0.82554	0.82921	0.83289	0.83658	0.84028
10	1	1996	0.77112	0.77481	0.77851	0.78222	0.78595	0.78969	0.79344	0.79720	0.80098	0.80476	0.80856	0.81237	0.81620	0.82003	0.82388	0.82774
4	1	1997	0.75701	0.76084	0.76469	0.76854	0.77241	0.77629	0.78019	0.78409	0.78802	0.79195	0.79590	0.79986	0.80383	0.80782	0.81182	0.81583
10	1	1997	0.74648	0.75046	0.75445	0.75846	0.76249	0.76652	0.77057	0.77464	0.77872	0.78281	0.78692	0.79105	0.79518	0.79933	0.80350	0.80768
4	1	1998	0.73624	0.74036	0.74430	0.74866	0.75283	0.75702	0.76122	0.76544	0.76967	0.77392	0.77818	0.78246	0.78676	0.79107	0.79539	0.79973
10	1	1998	0.72627	0.73054	0.73482	0.73912	0.74343	0.74776	0.75211	0.75648	0.76086	0.76526	0.76967	0.77410	0.77855	0.78302	0.78750	0.79200
4	1	1999	0.71658	0.72098	0.72539	0.72983	0.73428	0.73876	0.74325	0.74775	0.75228	0.75682	0.76138	0.76596	0.77056	0.77517	0.77981	0.78446
10	1	1999	0.70715	0.71168	0.71623	0.72079	0.72538	0.72999	0.73462	0.73926	0.74393	0.74861	0.75331	0.75803	0.76277	0.76753	0.77231	0.77711
4	1	2000	0.69797	0.70263	0.70730	0.71200	0.71672	0.72146	0.72621	0.73099	0.73579	0.74061	0.74545	0.75031	0.75519	0.76009	0.76501	0.76995
10	1	2000	0.68109	0.68581	0.69055	0.69531	0.70010	0.70490	0.70973	0.71457	0.71944	0.72433	0.72925	0.73418	0.73913	0.74411	0.74910	0.75412
4	1	2001	0.67227	0.67710	0.68196	0.68684	0.69174	0.69666	0.70161	0.70658	0.71157	0.71659	0.72162	0.72668	0.73176	0.73687	0.74199	0.74714
10	1	2001	0.66369	0.66863	0.67360	0.67859	0.68361	0.68865	0.69371	0.69880	0.70391	0.70904	0.71420	0.71938	0.72459	0.72982	0.73507	0.74035
4	1	2002	0.65534	0.66039	0.66547	0.67057	0.67569	0.68085	0.68602	0.69123	0.69645	0.70170	0.70698	0.71228	0.71761	0.72296	0.72833	0.73373
10	1	2002	0.64722	0.65237	0.65756	0.66276	0.66800	0.67326	0.67854	0.68386	0.68920	0.69456	0.69995	0.70537	0.71081	0.71628	0.72177	0.72729
4	1	2003	0.63932	0.64458	0.64986	0.65517	0.66051	0.66587	0.67126	0.67668	0.68213	0.68761	0.69311	0.69864	0.70419	0.70978	0.71539	0.72102
10	1	2003	0.62739	0.63270	0.63804	0.64342	0.64881	0.65424	0.65970	0.66518	0.67070	0.67624	0.68181	0.68741	0.69303	0.69869	0.70437	0.71008
4	1	2004	0.61987	0.62528	0.63071	0.63618	0.64167	0.64720	0.65275	0.65834	0.66395	0.66960	0.67527	0.68097	0.68670	0.69246	0.69825	0.70407
10	1	2004	0.61256	0.61805	0.62358	0.62914	0.63472	0.64034	0.64600	0.65168	0.65739	0.66313	0.66891	0.67471	0.68054	0.68641	0.69230	0.69823
4	1	2005	0.60544	0.61103	0.61664	0.62229	0.62796	0.63368	0.63942	0.64519	0.65100	0.65684	0.66271	0.66861	0.67455	0.68051	0.68651	0.69253
10	1	2005	0.59852	0.60419	0.60989	0.61562	0.62138	0.62718	0.63302	0.63888	0.64478	0.65072	0.65668	0.66268	0.66871	0.67477	0.68087	0.68699
4	1	2006	0.59179	0.59753	0.60331	0.60913	0.61498	0.62087	0.62679	0.63274	0.63873	0.64476	0.65081	0.65690	0.66303	0.66919	0.67538	0.68160
10	1	2006	0.58523	0.59106	0.59692	0.60282	0.60875	0.61472	0.62073	0.62677	0.63284	0.63896	0.64510	0.65128	0.65750	0.66375	0.67004	0.67636

Maturing on or Before	3.500	3.625	3.750	3.875	4.000	4.125	4.250	4.375	4.500	4.625	4.750	4.875	5.000	5.125	5.250	5.375
4 1 2007	0.57885	0.58476	0.59070	0.59667	0.60269	0.60874	0.61483	0.62095	0.62711	0.63331	0.63954	0.64581	0.65212	0.65846	0.66484	0.67125
10 1 2007	0.57265	0.57862	0.58464	0.59069	0.59678	0.60291	0.60908	0.61529	0.62153	0.62781	0.63413	0.64049	0.64688	0.65331	0.65977	0.66628
4 1 2008	0.56660	0.57265	0.57874	0.58487	0.59104	0.59725	0.60349	0.60978	0.61610	0.62246	0.62886	0.63530	0.64178	0.64829	0.65485	0.66144
10 1 2008	0.56072	0.56684	0.57300	0.57920	0.58544	0.59173	0.59805	0.60441	0.61081	0.61726	0.62374	0.63026	0.63682	0.64341	0.65005	0.65673
4 1 2009	0.55500	0.56118	0.56741	0.57369	0.58000	0.58635	0.59275	0.59919	0.60567	0.61219	0.61875	0.62534	0.63198	0.63866	0.64538	0.65214
10 1 2009	0.54942	0.55568	0.56197	0.56831	0.57470	0.58112	0.58759	0.59410	0.60066	0.60725	0.61389	0.62056	0.62728	0.63404	0.64084	0.64768
4 1 2010	0.54399	0.55031	0.55668	0.56308	0.56953	0.57603	0.58257	0.58915	0.59578	0.60244	0.60915	0.61591	0.62270	0.62954	0.63642	0.64333
10 1 2010	0.53871	0.54509	0.55152	0.55799	0.56451	0.57107	0.57768	0.58433	0.59103	0.59777	0.60455	0.61137	0.61824	0.62516	0.63211	0.63911
4 1 2011	0.53356	0.54000	0.54649	0.55303	0.55961	0.56624	0.57292	0.57964	0.58640	0.59321	0.60006	0.60696	0.61390	0.62089	0.62792	0.63499
10 1 2011	0.52855	0.53505	0.54160	0.54820	0.55485	0.56154	0.56828	0.57506	0.58190	0.58877	0.59570	0.60267	0.60968	0.61674	0.62384	0.63098
4 1 2012	0.52366	0.53022	0.53684	0.54349	0.55020	0.55696	0.56376	0.57061	0.57751	0.58445	0.59145	0.59848	0.60557	0.61269	0.61987	0.62709
10 1 2012	0.51436	0.52092	0.52753	0.53418	0.54089	0.54764	0.55445	0.56130	0.56820	0.57514	0.58214	0.58918	0.59626	0.60339	0.61057	0.61779
4 1 2013	0.50972	0.51634	0.52300	0.52971	0.53648	0.54329	0.55015	0.55707	0.56403	0.57104	0.57809	0.58520	0.59235	0.59954	0.60679	0.61408
10 1 2013	0.50521	0.51187	0.51859	0.52536	0.53218	0.53905	0.54597	0.55294	0.55997	0.56704	0.57415	0.58132	0.58854	0.59580	0.60311	0.61046
4 1 2014	0.50081	0.50753	0.51430	0.52112	0.52800	0.53492	0.54190	0.54893	0.55601	0.56314	0.57032	0.57755	0.58483	0.59215	0.59952	0.60695
10 1 2014	0.49652	0.50329	0.51011	0.51699	0.52392	0.53090	0.53794	0.54502	0.55216	0.55935	0.56659	0.57388	0.58121	0.58860	0.59604	0.60352
4 1 2015	0.49234	0.49916	0.50604	0.51297	0.51995	0.52699	0.53407	0.54122	0.54841	0.55566	0.56295	0.57030	0.57770	0.58515	0.59264	0.60019
10 1 2015	0.48827	0.49514	0.50207	0.50905	0.51608	0.52317	0.53031	0.53751	0.54476	0.55206	0.55941	0.56682	0.57428	0.58178	0.58934	0.59695
4 1 2016	0.48431	0.49123	0.49820	0.50523	0.51231	0.51945	0.52665	0.53390	0.54120	0.54856	0.55597	0.56343	0.57094	0.57851	0.58613	0.59379
10 1 2016	0.48044	0.48741	0.49443	0.50151	0.50864	0.51583	0.52308	0.53038	0.53774	0.54515	0.55261	0.56013	0.56770	0.57532	0.58300	0.59072
4 1 2017	0.47848	0.48552	0.49262	0.49977	0.50698	0.51425	0.52158	0.52896	0.53640	0.54389	0.55144	0.55904	0.56669	0.57440	0.58216	0.58997
10 1 2017	0.47481	0.48189	0.48903	0.49624	0.50350	0.51081	0.51819	0.52562	0.53311	0.54066	0.54826	0.55591	0.56362	0.57138	0.57920	0.58707
4 1 2018	0.47123	0.47836	0.48554	0.49279	0.50010	0.50746	0.51489	0.52237	0.52991	0.53751	0.54516	0.55287	0.56063	0.56845	0.57632	0.58424
10 1 2018	0.46774	0.47491	0.48214	0.48943	0.49679	0.50420	0.51167	0.51920	0.52679	0.53444	0.54214	0.54990	0.55772	0.56559	0.57351	0.58149
4 1 2019	0.46433	0.47155	0.47882	0.48616	0.49356	0.50102	0.50854	0.51612	0.52375	0.53145	0.53920	0.54701	0.55488	0.56280	0.57078	0.57881
10 1 2019	0.46101	0.46827	0.47559	0.48297	0.49041	0.49792	0.50548	0.51311	0.52079	0.52854	0.53634	0.54420	0.55212	0.56009	0.56812	0.57620
4 1 2020	0.45777	0.46507	0.47243	0.47986	0.48734	0.49489	0.50251	0.51018	0.51791	0.52570	0.53355	0.54146	0.54943	0.55745	0.56553	0.57366
10 1 2020	0.45462	0.46195	0.46936	0.47682	0.48435	0.49195	0.49960	0.50732	0.51510	0.52294	0.53084	0.53879	0.54681	0.55488	0.56301	0.57119
4 1 2021	0.45154	0.45891	0.46636	0.47387	0.48144	0.48908	0.49678	0.50454	0.51236	0.52025	0.52819	0.53620	0.54426	0.55238	0.56056	0.56879
10 1 2021	0.44853	0.45595	0.46343	0.47098	0.47860	0.48628	0.49402	0.50183	0.50969	0.51762	0.52562	0.53367	0.54178	0.54994	0.55817	0.56645
4 1 2022	0.44560	0.45306	0.46058	0.46817	0.47583	0.48355	0.49133	0.49918	0.50709	0.51507	0.52310	0.53120	0.53936	0.54757	0.55584	0.56417
10 1 2022	0.44274	0.45023	0.45780	0.46543	0.47312	0.48089	0.48871	0.49661	0.50456	0.51258	0.52066	0.52880	0.53700	0.54526	0.55358	0.56196
4 1 2023	0.43995	0.44748	0.45508	0.46275	0.47049	0.47829	0.48616	0.49409	0.50209	0.51015	0.51828	0.52646	0.53471	0.54301	0.55138	0.55980
10 1 2023	0.43723	0.44479	0.45243	0.46014	0.46792	0.47576	0.48367	0.49164	0.49968	0.50779	0.51595	0.52418	0.53247	0.54082	0.54923	0.55770
4 1 2024	0.43457	0.44217	0.44985	0.45760	0.46541	0.47329	0.48124	0.48926	0.49734	0.50548	0.51369	0.52196	0.53029	0.53869	0.54714	0.55565
10 1 2024	0.43197	0.43962	0.44733	0.45511	0.46296	0.47089	0.47887	0.48693	0.49505	0.50324	0.51149	0.51980	0.52818	0.53661	0.54511	0.55366
4 1 2025	0.42944	0.43712	0.44487	0.45269	0.46058	0.46854	0.47657	0.48466	0.49282	0.50105	0.50934	0.51769	0.52611	0.53459	0.54313	0.55172
10 1 2025	0.42697	0.43468	0.44247	0.45033	0.45825	0.46625	0.47432	0.48245	0.49065	0.49892	0.50725	0.51564	0.52410	0.53262	0.54120	0.54984
4 1 2026	0.42456	0.43231	0.44013	0.44802	0.45598	0.46402	0.47212	0.48029	0.48853	0.49684	0.50521	0.51364	0.52214	0.53070	0.53932	0.54800
10 1 2026	0.42221	0.42999	0.43784	0.44577	0.45377	0.46184	0.46998	0.47819	0.48647	0.49481	0.50322	0.51169	0.52023	0.52883	0.53749	0.54622
4 1 2027	0.41991	0.42772	0.43561	0.44357	0.45161	0.45971	0.46789	0.47614	0.48445	0.49284	0.50128	0.50980	0.51837	0.52701	0.53571	0.54448
10 1 2027	0.41766	0.42551	0.43343	0.44143	0.44950	0.45764	0.46586	0.47414	0.48249	0.49091	0.49940	0.50795	0.51656	0.52524	0.53398	0.54278
4 1 2028	0.41547	0.42335	0.43131	0.43934	0.44744	0.45562	0.46387	0.47219	0.48058	0.48903	0.49756	0.50615	0.51480	0.52352	0.53229	0.54113

Maturing on or Before			5.500	5.625	5.750	5.875	6.000	6.125	6.250	6.375	6.500	6.625	6.750	6.875	7.000	7.125	7.250	7.375
10	1	1988	0.99673	0.99690	0.99707	0.99724	0.99741	0.99758	0.99775	0.99792	0.99809	0.99826	0.99843	0.99860	0.99877	0.99894	0.99911	0.99928
4	1	1989	0.98886	0.98933	0.98979	0.99026	0.99073	0.99120	0.99167	0.99214	0.99261	0.99308	0.99355	0.99402	0.99449	0.99496	0.99543	0.99590
10	1	1989	0.97972	0.98048	0.98124	0.98200	0.98275	0.98351	0.98427	0.98503	0.98579	0.98655	0.98732	0.98808	0.98884	0.98960	0.99037	0.99113
4	1	1990	0.96907	0.97010	0.97114	0.97218	0.97322	0.97425	0.97529	0.97634	0.97738	0.97842	0.97946	0.98051	0.98155	0.98260	0.98365	0.98469
10	1	1990	0.95955	0.96086	0.96217	0.96348	0.96479	0.96610	0.96741	0.96873	0.97005	0.97136	0.97268	0.97400	0.97533	0.97665	0.97798	0.97930
4	1	1991	0.94970	0.95127	0.95284	0.95441	0.95599	0.95757	0.95915	0.96073	0.96231	0.96390	0.96548	0.96707	0.96867	0.97026	0.97185	0.97345
10	1	1991	0.93953	0.94136	0.94318	0.94501	0.94684	0.94868	0.95052	0.95236	0.95420	0.95604	0.95789	0.95974	0.96159	0.96345	0.96530	0.96716
4	1	1992	0.92909	0.93116	0.93323	0.93530	0.93738	0.93946	0.94155	0.94364	0.94573	0.94782	0.94992	0.95202	0.95413	0.95624	0.95835	0.96046
10	1	1992	0.91838	0.92069	0.92300	0.92531	0.92763	0.92995	0.93227	0.93460	0.93693	0.93927	0.94161	0.94395	0.94630	0.94865	0.95101	0.95337
4	1	1993	0.90988	0.91241	0.91496	0.91751	0.92006	0.92262	0.92518	0.92775	0.93032	0.93290	0.93548	0.93807	0.94066	0.94325	0.94586	0.94846
10	1	1993	0.89893	0.90169	0.90445	0.90722	0.90999	0.91277	0.91555	0.91835	0.92114	0.92395	0.92675	0.92957	0.93239	0.93521	0.93805	0.94088
4	1	1994	0.88779	0.89076	0.89373	0.89671	0.89969	0.90268	0.90568	0.90869	0.91170	0.91472	0.91775	0.92078	0.92382	0.92686	0.92992	0.93298
10	1	1994	0.87541	0.87857	0.88174	0.88492	0.88810	0.89129	0.89449	0.89770	0.90091	0.90414	0.90737	0.91060	0.91385	0.91710	0.92036	0.92363
4	1	1995	0.86390	0.86725	0.87061	0.87398	0.87736	0.88074	0.88414	0.88754	0.89095	0.89437	0.89780	0.90124	0.90469	0.90814	0.91160	0.91508
10	1	1995	0.85228	0.85581	0.85935	0.86290	0.86646	0.87003	0.87362	0.87721	0.88081	0.88442	0.88803	0.89166	0.89530	0.89895	0.90261	0.90627
4	1	1996	0.84399	0.84771	0.85144	0.85518	0.85894	0.86270	0.86648	0.87026	0.87406	0.87787	0.88168	0.88551	0.88935	0.89320	0.89706	0.90093
10	1	1996	0.83161	0.83549	0.83939	0.84329	0.84721	0.85114	0.85508	0.85903	0.86300	0.86698	0.87096	0.87496	0.87898	0.88300	0.88703	0.89108
4	1	1997	0.81986	0.82390	0.82795	0.83201	0.83609	0.84018	0.84428	0.84840	0.85253	0.85667	0.86082	0.86499	0.86917	0.87336	0.87756	0.88178
10	1	1997	0.81187	0.81608	0.82030	0.82454	0.82879	0.83305	0.83733	0.84162	0.84592	0.85024	0.85457	0.85892	0.86328	0.86765	0.87204	0.87644
4	1	1998	0.80409	0.80846	0.81285	0.81725	0.82167	0.82610	0.83055	0.83501	0.83948	0.84398	0.84848	0.85300	0.85754	0.86209	0.86666	0.87124
10	1	1998	0.79651	0.80104	0.80559	0.81015	0.81473	0.81932	0.82394	0.82856	0.83321	0.83787	0.84254	0.84723	0.85194	0.85666	0.86140	0.86610
4	1	1999	0.78912	0.79381	0.79851	0.80323	0.80797	0.81272	0.81749	0.82228	0.82709	0.83191	0.83675	0.84161	0.84648	0.85137	0.85628	0.86121
10	1	1999	0.78193	0.78676	0.79161	0.79648	0.80137	0.80628	0.81121	0.81616	0.82112	0.82610	0.83110	0.83612	0.84116	0.84621	0.85128	0.85637
4	1	2000	0.77491	0.77989	0.78489	0.78991	0.79495	0.80001	0.80509	0.81019	0.81530	0.82044	0.82560	0.83077	0.83597	0.84118	0.84641	0.85166
10	1	2000	0.75916	0.76421	0.76929	0.77439	0.77951	0.78465	0.78981	0.79500	0.80020	0.80542	0.81066	0.81592	0.82121	0.82651	0.83183	0.83717
4	1	2001	0.75231	0.75750	0.76272	0.76795	0.77321	0.77849	0.78379	0.78911	0.79445	0.79982	0.80521	0.81061	0.81604	0.82149	0.82696	0.83245
10	1	2001	0.74565	0.75097	0.75631	0.76168	0.76707	0.77248	0.77792	0.78338	0.78886	0.79436	0.79989	0.80544	0.81101	0.81660	0.82222	0.82785
4	1	2002	0.73916	0.74461	0.75008	0.75557	0.76109	0.76664	0.77221	0.77780	0.78341	0.78905	0.79471	0.80040	0.80611	0.81184	0.81760	0.82337
10	1	2002	0.73284	0.73841	0.74401	0.74963	0.75527	0.76094	0.76664	0.77236	0.77811	0.78388	0.78967	0.79549	0.80133	0.80720	0.81309	0.81901
4	1	2003	0.72669	0.73238	0.73809	0.74384	0.74961	0.75540	0.76122	0.76707	0.77294	0.77884	0.78476	0.79071	0.79669	0.80268	0.80871	0.81476
10	1	2003	0.71582	0.72158	0.72737	0.73319	0.73904	0.74491	0.75081	0.75674	0.76269	0.76867	0.77468	0.78071	0.78677	0.79285	0.79896	0.80510
4	1	2004	0.70992	0.71579	0.72170	0.72763	0.73359	0.73958	0.74560	0.75164	0.75771	0.76381	0.76994	0.77609	0.78227	0.78848	0.79472	0.80098
10	1	2004	0.70418	0.71016	0.71618	0.72222	0.72829	0.73439	0.74052	0.74668	0.75287	0.75908	0.76533	0.77160	0.77790	0.78423	0.79058	0.79697
4	1	2005	0.69859	0.70468	0.71080	0.71695	0.72313	0.72934	0.73558	0.74185	0.74815	0.75448	0.76084	0.76722	0.77364	0.78008	0.78656	0.79306
10	1	2005	0.69315	0.69934	0.70557	0.71182	0.71811	0.72442	0.73077	0.73715	0.74356	0.75000	0.75647	0.76296	0.76949	0.77605	0.78264	0.78926
4	1	2006	0.68786	0.69415	0.70047	0.70683	0.71322	0.71964	0.72609	0.73257	0.73909	0.74563	0.75221	0.75882	0.76546	0.77213	0.77883	0.78556
10	1	2006	0.68271	0.68910	0.69552	0.70197	0.70846	0.71498	0.72153	0.72812	0.73474	0.74139	0.74807	0.75479	0.76154	0.76831	0.77512	0.78197
4	1	2007	0.67769	0.68418	0.69069	0.69724	0.70383	0.71045	0.71710	0.72379	0.73051	0.73726	0.74405	0.75087	0.75772	0.76460	0.77152	0.77847
10	1	2007	0.67281	0.67939	0.68600	0.69264	0.69932	0.70604	0.71279	0.71957	0.72639	0.73324	0.74013	0.74705	0.75400	0.76099	0.76801	0.77506
4	1	2008	0.66806	0.67473	0.68143	0.68816	0.69493	0.70174	0.70859	0.71547	0.72238	0.72933	0.73632	0.74333	0.75039	0.75747	0.76459	0.77175
10	1	2008	0.66344	0.67019	0.67698	0.68380	0.69067	0.69757	0.70450	0.71147	0.71848	0.72553	0.73261	0.73972	0.74687	0.75406	0.76127	0.76853
4	1	2009	0.65894	0.66577	0.67265	0.67956	0.68651	0.69350	0.70053	0.70759	0.71469	0.72182	0.72900	0.73621	0.74345	0.75073	0.75805	0.76540
10	1	2009	0.65456	0.66148	0.66844	0.67543	0.68247	0.68954	0.69666	0.70381	0.71100	0.71822	0.72549	0.73279	0.74012	0.74750	0.75491	0.76235

Maturing on or Before			5.500	5.625	5.750	5.875	6.000	6.125	6.250	6.375	6.500	6.625	6.750	6.875	7.000	7.125	7.250	7.375
4	1	2010	0.65029	0.65729	0.66433	0.67142	0.67854	0.68570	0.69289	0.70013	0.70741	0.71472	0.72207	0.72946	0.73689	0.74435	0.75185	0.75939
10	1	2010	0.64614	0.65322	0.66034	0.66751	0.67471	0.68195	0.68923	0.69655	0.70391	0.71131	0.71875	0.72623	0.73374	0.74129	0.74888	0.75651
4	1	2011	0.64211	0.64926	0.65646	0.66370	0.67098	0.67831	0.68567	0.69307	0.70052	0.70800	0.71552	0.72308	0.73068	0.73832	0.74600	0.75371
10	1	2011	0.63817	0.64541	0.65268	0.66000	0.66736	0.67476	0.68220	0.68969	0.69721	0.70478	0.71238	0.72002	0.72771	0.73543	0.74319	0.75099
4	1	2012	0.63435	0.64165	0.64900	0.65640	0.66383	0.67131	0.67883	0.68639	0.69400	0.70164	0.70932	0.71705	0.72481	0.73262	0.74046	0.74834
10	1	2012	0.62506	0.63237	0.63973	0.64713	0.65457	0.66205	0.66958	0.67715	0.68476	0.69241	0.70010	0.70784	0.71561	0.72342	0.73128	0.73917
4	1	2013	0.62141	0.62879	0.63622	0.64369	0.65120	0.65876	0.66636	0.67400	0.68169	0.68941	0.69718	0.70499	0.71284	0.72073	0.72866	0.73663
10	1	2013	0.61787	0.62531	0.63281	0.64035	0.64793	0.65556	0.66323	0.67094	0.67870	0.68650	0.69434	0.70222	0.71015	0.71811	0.72612	0.73416
4	1	2014	0.61441	0.62193	0.62949	0.63709	0.64475	0.65244	0.66018	0.66797	0.67580	0.68367	0.69158	0.69954	0.70753	0.71557	0.72365	0.73177
10	1	2014	0.61105	0.61863	0.62626	0.63393	0.64165	0.64941	0.65722	0.66508	0.67297	0.68091	0.68890	0.69692	0.70499	0.71310	0.72125	0.72944
4	1	2015	0.60778	0.61543	0.62312	0.63085	0.63864	0.64647	0.65434	0.66226	0.67023	0.67824	0.68629	0.69438	0.70252	0.71070	0.71892	0.72718
10	1	2015	0.60460	0.61231	0.62006	0.62786	0.63571	0.64360	0.65154	0.65953	0.66756	0.67563	0.68375	0.69192	0.70012	0.70837	0.71666	0.72499
4	1	2016	0.60151	0.60927	0.61709	0.62495	0.63286	0.64082	0.64882	0.65687	0.66497	0.67311	0.68129	0.68952	0.69779	0.70610	0.71446	0.72286
10	1	2016	0.59850	0.60632	0.61420	0.62212	0.63009	0.63811	0.64617	0.65429	0.66245	0.67065	0.67890	0.68719	0.69553	0.70390	0.71233	0.72079
4	1	2017	0.59784	0.60575	0.61371	0.62173	0.62979	0.63790	0.64606	0.65426	0.66252	0.67081	0.67916	0.68755	0.69598	0.70445	0.71297	0.72153
10	1	2017	0.59499	0.60296	0.61098	0.61905	0.62718	0.63535	0.64356	0.65183	0.66014	0.66850	0.67691	0.68536	0.69385	0.70239	0.71097	0.71959
4	1	2018	0.59222	0.60024	0.60832	0.61645	0.62463	0.63286	0.64114	0.64946	0.65784	0.66625	0.67472	0.68323	0.69178	0.70038	0.70903	0.71771
10	1	2018	0.58952	0.59760	0.60574	0.61392	0.62216	0.63044	0.63878	0.64716	0.65559	0.66407	0.67259	0.68116	0.68978	0.69844	0.70714	0.71588
4	1	2019	0.58689	0.59503	0.60322	0.61146	0.61975	0.62809	0.63649	0.64492	0.65341	0.66195	0.67053	0.67916	0.68783	0.69655	0.70531	0.71411
10	1	2019	0.58434	0.59253	0.60077	0.60907	0.61741	0.62581	0.63426	0.64275	0.65129	0.65988	0.66852	0.67721	0.68594	0.69471	0.70353	0.71239
4	1	2020	0.58185	0.59010	0.59839	0.60674	0.61514	0.62359	0.63209	0.64064	0.64924	0.65788	0.66657	0.67531	0.68410	0.69293	0.70180	0.71072
10	1	2020	0.57943	0.58773	0.59607	0.60447	0.61293	0.62143	0.62998	0.63858	0.64723	0.65593	0.66468	0.67347	0.68231	0.69120	0.70012	0.70910
4	1	2021	0.57708	0.58542	0.59382	0.60227	0.61077	0.61933	0.62793	0.63659	0.64529	0.65404	0.66284	0.67169	0.68058	0.68952	0.69850	0.70752
10	1	2021	0.57479	0.58318	0.59163	0.60013	0.60868	0.61729	0.62594	0.63465	0.64340	0.65221	0.66106	0.66995	0.67890	0.68789	0.69692	0.70600
4	1	2022	0.57256	0.58100	0.58949	0.59804	0.60665	0.61530	0.62401	0.63276	0.64157	0.65042	0.65932	0.66827	0.67726	0.68630	0.69539	0.70452
10	1	2022	0.57039	0.57888	0.58742	0.59602	0.60467	0.61337	0.62212	0.63093	0.63978	0.64869	0.65764	0.66664	0.67568	0.68477	0.69390	0.70308
4	1	2023	0.56828	0.57681	0.58540	0.59405	0.60274	0.61149	0.62030	0.62915	0.63805	0.64700	0.65600	0.66505	0.67414	0.68328	0.69246	0.70169
10	1	2023	0.56622	0.57480	0.58344	0.59213	0.60087	0.60967	0.61852	0.62742	0.63637	0.64537	0.65441	0.66351	0.67265	0.68183	0.69106	0.70034
4	1	2024	0.56422	0.57285	0.58153	0.59026	0.59905	0.60790	0.61679	0.62574	0.63473	0.64378	0.65287	0.66201	0.67120	0.68043	0.68971	0.69903
10	1	2024	0.56227	0.57094	0.57967	0.58845	0.59728	0.60617	0.61511	0.62410	0.63314	0.64223	0.65137	0.66056	0.66979	0.67907	0.68839	0.69775
4	1	2025	0.56038	0.56909	0.57788	0.58669	0.59556	0.60450	0.61348	0.62252	0.63160	0.64074	0.64992	0.65915	0.66842	0.67775	0.68711	0.69652
10	1	2025	0.55854	0.56729	0.57610	0.58497	0.59389	0.60287	0.61189	0.62097	0.63010	0.63928	0.64851	0.65778	0.66710	0.67647	0.68587	0.69533
4	1	2026	0.55674	0.56554	0.57439	0.58330	0.59227	0.60128	0.61035	0.61947	0.62865	0.63787	0.64714	0.65645	0.66581	0.67522	0.68467	0.69417
10	1	2026	0.55500	0.56383	0.57273	0.58168	0.59069	0.59974	0.60886	0.61802	0.62723	0.63649	0.64581	0.65516	0.66457	0.67402	0.68351	0.69304
4	1	2027	0.55330	0.56217	0.57111	0.58010	0.58915	0.59825	0.60740	0.61660	0.62586	0.63516	0.64451	0.65391	0.66336	0.67285	0.68238	0.69196
10	1	2027	0.55164	0.56056	0.56954	0.57857	0.58765	0.59679	0.60599	0.61523	0.62452	0.63387	0.64326	0.65270	0.66218	0.67171	0.68128	0.69090
4	1	2028	0.55003	0.55899	0.56801	0.57708	0.58620	0.59538	0.60461	0.61390	0.62323	0.63261	0.64204	0.65152	0.66104	0.67061	0.68022	0.68988

Maturing on or Before			7.500	7.625	7.750	7.875	8.000	8.125	8.250	8.375	8.500	8.625	8.750	8.875	9.000	9.125	9.250	9.375
10	1	1988	0.99945	0.99962	0.99979	0.99996	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
4	1	1989	0.99637	0.99684	0.99731	0.99778	0.99826	0.99873	0.99920	0.99967	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
10	1	1989	0.99189	0.99266	0.99342	0.99419	0.99496	0.99572	0.99649	0.99726	0.99802	0.99879	0.99956	1.00000	1.00000	1.00000	1.00000	1.00000
4	1	1990	0.98574	0.98679	0.98784	0.98889	0.98995	0.99100	0.99205	0.99311	0.99416	0.99522	0.99628	0.99733	0.99839	0.99945	1.00000	1.00000
10	1	1990	0.98063	0.98196	0.98329	0.98462	0.98595	0.98729	0.98862	0.98996	0.99130	0.99264	0.99398	0.99532	0.99666	0.99801	0.99935	1.00000
4	1	1991	0.97505	0.97665	0.97825	0.97986	0.98146	0.98307	0.98468	0.98629	0.98791	0.98952	0.99114	0.99276	0.99438	0.99601	0.99763	0.99926
10	1	1991	0.96902	0.97089	0.97276	0.97463	0.97650	0.97837	0.98025	0.98213	0.98401	0.98590	0.98779	0.98968	0.99157	0.99346	0.99536	0.99726
4	1	1992	0.96258	0.96470	0.96682	0.96895	0.97108	0.97322	0.97535	0.97749	0.97964	0.98178	0.98393	0.98609	0.98824	0.99040	0.99256	0.99473
10	1	1992	0.95574	0.95811	0.96048	0.96285	0.96524	0.96762	0.97001	0.97240	0.97480	0.97720	0.97960	0.98201	0.98442	0.98684	0.98926	0.99169
4	1	1993	0.95107	0.95369	0.95631	0.95894	0.96157	0.96420	0.96684	0.96949	0.97214	0.97479	0.97745	0.98012	0.98278	0.98546	0.98814	0.99082
10	1	1993	0.94372	0.94657	0.94943	0.95229	0.95515	0.95802	0.96090	0.96378	0.96667	0.96957	0.97246	0.97537	0.97828	0.98120	0.98412	0.98705
4	1	1994	0.93604	0.93911	0.94219	0.94528	0.94837	0.95147	0.95457	0.95768	0.96080	0.96393	0.96706	0.97020	0.97334	0.97649	0.97965	0.98281
10	1	1994	0.92690	0.93019	0.93348	0.93677	0.94008	0.94339	0.94671	0.95004	0.95338	0.95672	0.96007	0.96343	0.96679	0.97016	0.97354	0.97693
4	1	1995	0.91856	0.92204	0.92554	0.92905	0.93256	0.93608	0.93961	0.94315	0.94670	0.95026	0.95382	0.95739	0.96098	0.96456	0.96816	0.97177
10	1	1995	0.90995	0.91364	0.91733	0.92104	0.92475	0.92847	0.93221	0.93595	0.93970	0.94346	0.94723	0.95101	0.95480	0.95860	0.96240	0.96622
4	1	1996	0.90481	0.90870	0.91260	0.91652	0.92044	0.92437	0.92832	0.93227	0.93623	0.94021	0.94419	0.94819	0.95219	0.95621	0.96024	0.96427
10	1	1996	0.89514	0.89921	0.90329	0.90738	0.91148	0.91560	0.91972	0.92386	0.92801	0.93217	0.93634	0.94052	0.94472	0.94892	0.95314	0.95736
4	1	1997	0.88601	0.89025	0.89450	0.89877	0.90305	0.90734	0.91164	0.91596	0.92029	0.92463	0.92898	0.93335	0.93772	0.94211	0.94651	0.95093
10	1	1997	0.88086	0.88529	0.88973	0.89418	0.89865	0.90313	0.90763	0.91214	0.91666	0.92119	0.92574	0.93030	0.93488	0.93947	0.94407	0.94868
4	1	1998	0.87583	0.88044	0.88507	0.88970	0.89436	0.89903	0.90371	0.90840	0.91311	0.91784	0.92258	0.92733	0.93210	0.93688	0.94168	0.94649
10	1	1998	0.87093	0.87572	0.88052	0.88534	0.89017	0.89502	0.89988	0.90476	0.90966	0.91457	0.91949	0.92443	0.92939	0.93436	0.93934	0.94435
4	1	1999	0.86615	0.87111	0.87608	0.88107	0.88608	0.89111	0.89615	0.90121	0.90628	0.91137	0.91648	0.92160	0.92674	0.93190	0.93707	0.94225
10	1	1999	0.86148	0.86661	0.87175	0.87691	0.88209	0.88729	0.89251	0.89774	0.90299	0.90825	0.91354	0.91884	0.92416	0.92949	0.93484	0.94021
4	1	2000	0.85693	0.86222	0.86753	0.87286	0.87821	0.88357	0.88895	0.89435	0.89977	0.90521	0.91067	0.91614	0.92164	0.92715	0.93268	0.93822
10	1	2000	0.84254	0.84792	0.85332	0.85874	0.86418	0.86964	0.87512	0.88062	0.88614	0.89167	0.89723	0.90280	0.90840	0.91401	0.91964	0.92529
4	1	2001	0.83797	0.84350	0.84905	0.85463	0.86022	0.86584	0.87147	0.87713	0.88280	0.88850	0.89422	0.89995	0.90571	0.91148	0.91728	0.92309
10	1	2001	0.83351	0.83919	0.84489	0.85062	0.85636	0.86213	0.86792	0.87373	0.87956	0.88541	0.89128	0.89717	0.90309	0.90902	0.91498	0.92095
4	1	2002	0.82917	0.83500	0.84084	0.84671	0.85260	0.85852	0.86445	0.87041	0.87639	0.88239	0.88842	0.89446	0.90053	0.90662	0.91273	0.91886
10	1	2002	0.82495	0.83091	0.83690	0.84291	0.84894	0.85500	0.86108	0.86718	0.87331	0.87946	0.88563	0.89183	0.89804	0.90428	0.91055	0.91683
4	1	2003	0.82083	0.82693	0.83306	0.83920	0.84538	0.85157	0.85780	0.86404	0.87031	0.87660	0.88292	0.88926	0.89562	0.90201	0.90842	0.91485
10	1	2003	0.81126	0.81745	0.82366	0.82990	0.83617	0.84245	0.84877	0.85510	0.86147	0.86785	0.87427	0.88070	0.88716	0.89364	0.90015	0.90668
4	1	2004	0.80727	0.81358	0.81992	0.82629	0.83268	0.83910	0.84555	0.85202	0.85851	0.86503	0.87158	0.87815	0.88475	0.89137	0.89801	0.90468
10	1	2004	0.80338	0.80982	0.81628	0.82277	0.82929	0.83584	0.84241	0.84901	0.85564	0.86229	0.86897	0.87567	0.88240	0.88916	0.89594	0.90274
4	1	2005	0.79959	0.80615	0.81274	0.81935	0.82600	0.83267	0.83937	0.84609	0.85284	0.85962	0.86643	0.87326	0.88012	0.88700	0.89391	0.90085
10	1	2005	0.79591	0.80259	0.80929	0.81603	0.82279	0.82958	0.83640	0.84325	0.85012	0.85702	0.86395	0.87091	0.87790	0.88491	0.89195	0.89901
4	1	2006	0.79232	0.79912	0.80594	0.81279	0.81967	0.82658	0.83351	0.84048	0.84748	0.85450	0.86155	0.86863	0.87574	0.88287	0.89003	0.89722
10	1	2006	0.78884	0.79574	0.80267	0.80964	0.81663	0.82365	0.83071	0.83779	0.84490	0.85204	0.85921	0.86641	0.87364	0.88089	0.88817	0.89548
4	1	2007	0.78545	0.79246	0.79950	0.80657	0.81368	0.82081	0.82798	0.83517	0.84240	0.84965	0.85694	0.86425	0.87160	0.87897	0.88637	0.89380
10	1	2007	0.78215	0.78926	0.79641	0.80359	0.81081	0.81805	0.82532	0.83263	0.83997	0.84733	0.85473	0.86216	0.86961	0.87710	0.88461	0.89216
4	1	2008	0.77894	0.78616	0.79341	0.80070	0.80801	0.81536	0.82274	0.83016	0.83760	0.84508	0.85258	0.86012	0.86768	0.87528	0.88291	0.89056
10	1	2008	0.77582	0.78314	0.79049	0.79788	0.80530	0.81275	0.82024	0.82775	0.83530	0.84288	0.85050	0.85814	0.86581	0.87352	0.88125	0.88901
4	1	2009	0.77278	0.78020	0.78765	0.79514	0.80266	0.81021	0.81780	0.82542	0.83307	0.84075	0.84847	0.85622	0.86399	0.87180	0.87964	0.88751
10	1	2009	0.76983	0.77734	0.78489	0.79248	0.80009	0.80775	0.81543	0.82315	0.83090	0.83868	0.84650	0.85435	0.86223	0.87014	0.87808	0.88605

Maturing on or Before			7.500	7.625	7.750	7.875	8.000	8.125	8.250	8.375	8.500	8.625	8.750	8.875	9.000	9.125	9.250	9.375
4	1	2010	0.76696	0.77457	0.78221	0.78989	0.79760	0.80535	0.81313	0.82094	0.82879	0.83667	0.84459	0.85253	0.86051	0.86852	0.87656	0.88463
10	1	2010	0.76417	0.77187	0.77960	0.78737	0.79518	0.80302	0.81089	0.81880	0.82674	0.83472	0.84273	0.85077	0.85884	0.86695	0.87509	0.88326
4	1	2011	0.76146	0.76925	0.77707	0.78493	0.79283	0.80076	0.80872	0.81672	0.82476	0.83282	0.84093	0.84906	0.85723	0.86543	0.87366	0.88192
10	1	2011	0.75882	0.76670	0.77461	0.78256	0.79054	0.79856	0.80661	0.81470	0.82282	0.83098	0.83917	0.84740	0.85566	0.86395	0.87227	0.88063
4	1	2012	0.75626	0.76422	0.77222	0.78025	0.78832	0.79642	0.80456	0.81274	0.82095	0.82920	0.83747	0.84579	0.85414	0.86252	0.87093	0.87937
10	1	2012	0.74710	0.75506	0.76307	0.77111	0.77919	0.78730	0.79545	0.80364	0.81186	0.82012	0.82841	0.83673	0.84509	0.85348	0.86190	0.87036
4	1	2013	0.74464	0.75268	0.76077	0.76889	0.77705	0.78524	0.79347	0.80174	0.81004	0.81838	0.82675	0.83516	0.84360	0.85207	0.86057	0.86911
10	1	2013	0.74225	0.75037	0.75853	0.76673	0.77497	0.78324	0.79155	0.79990	0.80828	0.81669	0.82514	0.83363	0.84215	0.85070	0.85929	0.86791
4	1	2014	0.73993	0.74812	0.75636	0.76463	0.77295	0.78130	0.78968	0.79811	0.80656	0.81506	0.82359	0.83215	0.84075	0.84938	0.85804	0.86674
10	1	2014	0.73767	0.74594	0.75425	0.76260	0.77099	0.77941	0.78787	0.79637	0.80490	0.81347	0.82208	0.83071	0.83939	0.84809	0.85683	0.86561
4	1	2015	0.73548	0.74383	0.75221	0.76063	0.76909	0.77758	0.78612	0.79469	0.80329	0.81193	0.82061	0.82932	0.83807	0.84685	0.85566	0.86451
10	1	2015	0.73336	0.74177	0.75022	0.75871	0.76724	0.77581	0.78441	0.79305	0.80173	0.81044	0.81919	0.82798	0.83679	0.84564	0.85453	0.86345
4	1	2016	0.73130	0.73978	0.74829	0.75685	0.76545	0.77409	0.78276	0.79147	0.80022	0.80900	0.81782	0.82667	0.83556	0.84448	0.85343	0.86242
10	1	2016	0.72929	0.73784	0.74642	0.75505	0.76371	0.77242	0.78116	0.78993	0.79875	0.80760	0.81648	0.82540	0.83436	0.84335	0.85237	0.86142
4	1	2017	0.73013	0.73878	0.74746	0.75618	0.76495	0.77375	0.78259	0.79147	0.80038	0.80933	0.81832	0.82734	0.83639	0.84548	0.85460	0.86376
10	1	2017	0.72826	0.73696	0.74571	0.75450	0.76333	0.77219	0.78110	0.79004	0.79901	0.80803	0.81708	0.82616	0.83528	0.84444	0.85363	0.86285
4	1	2018	0.72644	0.73521	0.74402	0.75286	0.76175	0.77068	0.77965	0.78865	0.79769	0.80677	0.81588	0.82503	0.83421	0.84343	0.85268	0.86196
10	1	2018	0.72467	0.73350	0.74237	0.75128	0.76023	0.76922	0.77824	0.78731	0.79641	0.80555	0.81472	0.82393	0.83317	0.84245	0.85176	0.86110
4	1	2019	0.72296	0.73184	0.74077	0.74974	0.75875	0.76780	0.77688	0.78601	0.79517	0.80437	0.81360	0.82287	0.83217	0.84150	0.85087	0.86028
10	1	2019	0.72129	0.73024	0.73922	0.74825	0.75732	0.76642	0.77557	0.78475	0.79397	0.80322	0.81251	0.82184	0.83120	0.84059	0.85002	0.85947
4	1	2020	0.71968	0.72868	0.73772	0.74680	0.75593	0.76509	0.77429	0.78353	0.79280	0.80211	0.81146	0.82084	0.83025	0.83970	0.84919	0.85870
10	1	2020	0.71811	0.72717	0.73626	0.74540	0.75458	0.76380	0.77305	0.78234	0.79167	0.80104	0.81044	0.81967	0.82934	0.83885	0.84838	0.85795
4	1	2021	0.71659	0.72570	0.73485	0.74404	0.75327	0.76254	0.77185	0.78120	0.79058	0.80000	0.80945	0.81894	0.82846	0.83802	0.84761	0.85722
10	1	2021	0.71512	0.72428	0.73348	0.74273	0.75201	0.76133	0.77069	0.78009	0.78952	0.79899	0.80850	0.81804	0.82761	0.83722	0.84685	0.85652
4	1	2022	0.71369	0.72290	0.73215	0.74145	0.75078	0.76015	0.76957	0.77901	0.78850	0.79802	0.80757	0.81716	0.82679	0.83644	0.84613	0.85585
10	1	2022	0.71230	0.72156	0.73087	0.74021	0.74959	0.75902	0.76848	0.77797	0.78751	0.79708	0.80668	0.81632	0.82599	0.83569	0.84543	0.85519
4	1	2023	0.71096	0.72027	0.72962	0.73901	0.74844	0.75791	0.76742	0.77697	0.78655	0.79616	0.80581	0.81550	0.82522	0.83497	0.84475	0.85456
10	1	2023	0.70965	0.71901	0.72841	0.73785	0.74733	0.75684	0.76640	0.77599	0.78562	0.79528	0.80498	0.81471	0.82447	0.83427	0.84409	0.85395
4	1	2024	0.70839	0.71779	0.72724	0.73672	0.74625	0.75581	0.76541	0.77505	0.78472	0.79443	0.80417	0.81394	0.82375	0.83359	0.84346	0.85336
10	1	2024	0.70716	0.71661	0.72610	0.73563	0.74520	0.75481	0.76445	0.77413	0.78385	0.79360	0.80339	0.81320	0.82305	0.83294	0.84285	0.85279
4	1	2025	0.70597	0.71547	0.72500	0.73458	0.74419	0.75384	0.76353	0.77325	0.78301	0.79280	0.80263	0.81249	0.82238	0.83230	0.84226	0.85224
10	1	2025	0.70482	0.71436	0.72394	0.73355	0.74321	0.75290	0.76263	0.77239	0.78219	0.79203	0.80190	0.81180	0.82173	0.83169	0.84169	0.85171
4	1	2026	0.70371	0.71328	0.72290	0.73256	0.74226	0.75199	0.76176	0.77157	0.78141	0.79128	0.80119	0.81113	0.82110	0.83110	0.84114	0.85120
10	1	2026	0.70262	0.71224	0.72190	0.73160	0.74134	0.75111	0.76092	0.77077	0.78065	0.79056	0.80051	0.81048	0.82049	0.83053	0.84060	0.85070
4	1	2027	0.70157	0.71123	0.72093	0.73067	0.74045	0.75026	0.76011	0.76999	0.77991	0.78986	0.79985	0.80986	0.81991	0.82998	0.84009	0.85022
10	1	2027	0.70056	0.71026	0.71999	0.72977	0.73958	0.74943	0.75932	0.76924	0.77920	0.78919	0.79921	0.80926	0.81934	0.82945	0.83959	0.84976
4	1	2028	0.69957	0.70931	0.71908	0.72890	0.73875	0.74864	0.75856	0.76852	0.77851	0.78853	0.79859	0.80868	0.81879	0.82894	0.83911	0.84932

Maturing on or Before	9.500	9.625	9.750	10.000	10.500	10.625	10.750	11.375	11.625	12.250	12.375
10 1 1988	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
4 1 1989	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
10 1 1989	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
4 1 1990	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
10 1 1990	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
4 1 1991	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
10 1 1991	0.99916	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
4 1 1992	0.99690	0.99907	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
10 1 1992	0.99411	0.99655	0.99898	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
4 1 1993	0.99351	0.99620	0.99890	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
10 1 1993	0.98998	0.99292	0.99586	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
4 1 1994	0.98598	0.98916	0.99234	0.99873	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
10 1 1994	0.98032	0.98373	0.98713	0.99397	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
4 1 1995	0.97538	0.97900	0.98264	0.98992	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
10 1 1995	0.97004	0.97388	0.97772	0.98544	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
4 1 1996	0.96832	0.97237	0.97644	0.98460	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
10 1 1996	0.96160	0.96585	0.97011	0.97867	0.99590	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
4 1 1997	0.95535	0.95979	0.96424	0.97317	0.99118	0.99572	1.00000	1.00000	1.00000	1.00000	1.00000
10 1 1997	0.95331	0.95795	0.96260	0.97195	0.99079	0.99553	1.00000	1.00000	1.00000	1.00000	1.00000
4 1 1998	0.95131	0.95615	0.96100	0.97075	0.99040	0.99535	1.00000	1.00000	1.00000	1.00000	1.00000
10 1 1998	0.94936	0.95439	0.95944	0.96957	0.99002	0.99517	1.00000	1.00000	1.00000	1.00000	1.00000
4 1 1999	0.94746	0.95268	0.95791	0.96843	0.98965	0.99500	1.00000	1.00000	1.00000	1.00000	1.00000
10 1 1999	0.94560	0.95100	0.95642	0.96731	0.98929	0.99483	1.00000	1.00000	1.00000	1.00000	1.00000
4 1 2000	0.94379	0.94937	0.95497	0.96623	0.98894	0.99466	1.00000	1.00000	1.00000	1.00000	1.00000
10 1 2000	0.93096	0.93665	0.94235	0.95382	0.97697	0.98280	0.98865	1.00000	1.00000	1.00000	1.00000
4 1 2001	0.92893	0.93478	0.94066	0.95246	0.97629	0.98230	0.98832	1.00000	1.00000	1.00000	1.00000
10 1 2001	0.92695	0.93296	0.93900	0.95113	0.97563	0.98181	0.98800	1.00000	1.00000	1.00000	1.00000
4 1 2002	0.92502	0.93119	0.93739	0.94984	0.97499	0.98133	0.98769	1.00000	1.00000	1.00000	1.00000
10 1 2002	0.92314	0.92946	0.93582	0.94858	0.97437	0.98087	0.98739	1.00000	1.00000	1.00000	1.00000
4 1 2003	0.92131	0.92778	0.93429	0.94735	0.97376	0.98041	0.98709	1.00000	1.00000	1.00000	1.00000
10 1 2003	0.91324	0.91981	0.92642	0.93969	0.96650	0.97326	0.98004	1.00000	1.00000	1.00000	1.00000
4 1 2004	0.91138	0.91810	0.92484	0.93839	0.96578	0.97269	0.97962	1.00000	1.00000	1.00000	1.00000
10 1 2004	0.90957	0.91642	0.92330	0.93714	0.96509	0.97213	0.97920	1.00000	1.00000	1.00000	1.00000
4 1 2005	0.90781	0.91480	0.92181	0.93591	0.96441	0.97159	0.97880	1.00000	1.00000	1.00000	1.00000
10 1 2005	0.90610	0.91322	0.92036	0.93472	0.96375	0.97107	0.97841	1.00000	1.00000	1.00000	1.00000
4 1 2006	0.90444	0.91168	0.91895	0.93357	0.96311	0.97056	0.97803	1.00000	1.00000	1.00000	1.00000
10 1 2006	0.90282	0.91019	0.91758	0.93244	0.96249	0.97006	0.97766	1.00000	1.00000	1.00000	1.00000
4 1 2007	0.90125	0.90874	0.91625	0.93135	0.96189	0.96958	0.97731	1.00000	1.00000	1.00000	1.00000
10 1 2007	0.89973	0.90733	0.91496	0.93029	0.96130	0.96912	0.97696	1.00000	1.00000	1.00000	1.00000
4 1 2008	0.89825	0.90596	0.91370	0.92927	0.96073	0.96866	0.97662	1.00000	1.00000	1.00000	1.00000
10 1 2008	0.89681	0.90463	0.91248	0.92827	0.96018	0.96822	0.97630	1.00000	1.00000	1.00000	1.00000
4 1 2009	0.89541	0.90334	0.91130	0.92730	0.95964	0.96780	0.97598	1.00000	1.00000	1.00000	1.00000
10 1 2009	0.89405	0.90208	0.91015	0.92636	0.95912	0.96739	0.97567	1.00000	1.00000	1.00000	1.00000

Maturing on or Before			9.500	9.625	9.750	10.000	10.500	10.625	10.750	11.375	11.625	12.250	12.375
4	1	2010	0.89274	0.90087	0.90903	0.92545	0.95862	0.96699	0.97538	1.00000	1.00000	1.00000	1.00000
10	1	2010	0.89146	0.89969	0.90795	0.92456	0.95813	0.96660	0.97509	1.00000	1.00000	1.00000	1.00000
4	1	2011	0.89022	0.89854	0.90690	0.92370	0.95766	0.96622	0.97481	1.00000	1.00000	1.00000	1.00000
10	1	2011	0.88902	0.89743	0.90588	0.92287	0.95720	0.96586	0.97454	1.00000	1.00000	1.00000	1.00000
4	1	2012	0.88785	0.89636	0.90490	0.92206	0.95676	0.96550	0.97428	1.00000	1.00000	1.00000	1.00000
10	1	2012	0.87884	0.88736	0.89591	0.91310	0.94783	0.95658	0.96536	1.00000	1.00000	1.00000	1.00000
4	1	2013	0.87768	0.88628	0.89491	0.91227	0.94733	0.95617	0.96504	1.00000	1.00000	1.00000	1.00000
10	1	2013	0.87656	0.88524	0.89395	0.91147	0.94686	0.95577	0.96472	1.00000	1.00000	1.00000	1.00000
4	1	2014	0.87547	0.88423	0.89302	0.91069	0.94639	0.95539	0.96442	1.00000	1.00000	1.00000	1.00000
10	1	2014	0.87441	0.88325	0.89211	0.90994	0.94595	0.95502	0.96412	1.00000	1.00000	1.00000	1.00000
4	1	2015	0.87339	0.88230	0.89124	0.90921	0.94552	0.95466	0.96384	1.00000	1.00000	1.00000	1.00000
10	1	2015	0.87240	0.88138	0.89039	0.90851	0.94510	0.95432	0.96356	1.00000	1.00000	1.00000	1.00000
4	1	2016	0.87144	0.88049	0.88957	0.90783	0.94470	0.95398	0.96330	1.00000	1.00000	1.00000	1.00000
10	1	2016	0.87051	0.87963	0.88878	0.90717	0.94431	0.95366	0.96304	1.00000	1.00000	1.00000	1.00000
4	1	2017	0.87295	0.88217	0.89142	0.91001	0.94755	0.95701	0.96649	1.00000	1.00000	1.00000	1.00000
10	1	2017	0.87210	0.88138	0.89070	0.90942	0.94721	0.95673	0.96627	1.00000	1.00000	1.00000	1.00000
4	1	2018	0.87128	0.88062	0.89000	0.90884	0.94688	0.95646	0.96606	1.00000	1.00000	1.00000	1.00000
10	1	2018	0.87048	0.87989	0.88932	0.90829	0.94656	0.95620	0.96586	1.00000	1.00000	1.00000	1.00000
4	1	2019	0.86971	0.87917	0.88867	0.90775	0.94625	0.95595	0.96567	1.00000	1.00000	1.00000	1.00000
10	1	2019	0.86896	0.87849	0.88804	0.90723	0.94596	0.95571	0.96548	1.00000	1.00000	1.00000	1.00000
4	1	2020	0.86824	0.87782	0.88743	0.90673	0.94567	0.95547	0.96530	1.00000	1.00000	1.00000	1.00000
10	1	2020	0.86755	0.87718	0.88684	0.90625	0.94539	0.95525	0.96512	1.00000	1.00000	1.00000	1.00000
4	1	2021	0.86686	0.87656	0.88627	0.90578	0.94513	0.95503	0.96496	1.00000	1.00000	1.00000	1.00000
10	1	2021	0.86623	0.87596	0.88572	0.90533	0.94487	0.95482	0.96479	1.00000	1.00000	1.00000	1.00000
4	1	2022	0.86560	0.87538	0.88519	0.90489	0.94462	0.95462	0.96464	1.00000	1.00000	1.00000	1.00000
10	1	2022	0.86499	0.87482	0.88467	0.90447	0.94438	0.95442	0.96449	1.00000	1.00000	1.00000	1.00000
4	1	2023	0.86440	0.87428	0.88418	0.90406	0.94415	0.95423	0.96434	1.00000	1.00000	1.00000	1.00000
10	1	2023	0.86384	0.87375	0.88370	0.90367	0.94393	0.95405	0.96420	1.00000	1.00000	1.00000	1.00000
4	1	2024	0.86329	0.87325	0.88324	0.90329	0.94371	0.95388	0.96407	1.00000	1.00000	1.00000	1.00000
10	1	2024	0.86276	0.87276	0.88279	0.90293	0.94351	0.95371	0.96394	1.00000	1.00000	1.00000	1.00000
4	1	2025	0.86225	0.87229	0.88236	0.90258	0.94331	0.95355	0.96381	1.00000	1.00000	1.00000	1.00000
10	1	2025	0.86176	0.87184	0.88195	0.90224	0.94311	0.95339	0.96369	1.00000	1.00000	1.00000	1.00000
4	1	2026	0.86129	0.87140	0.88155	0.90191	0.94293	0.95324	0.96357	1.00000	1.00000	1.00000	1.00000
10	1	2026	0.86083	0.87098	0.88116	0.90159	0.94275	0.95310	0.96346	1.00000	1.00000	1.00000	1.00000
4	1	2027	0.86038	0.87057	0.88079	0.90129	0.94258	0.95296	0.96335	1.00000	1.00000	1.00000	1.00000
10	1	2027	0.85996	0.87018	0.88043	0.90100	0.94241	0.95282	0.96325	1.00000	1.00000	1.00000	1.00000
4	1	2028	0.85955	0.86980	0.88008	0.90072	0.94226	0.95269	0.96315	1.00000	1.00000	1.00000	1.00000

[ATTACHMENT III]

FARMERS HOME ADMINISTRATION
DISCOUNT PURCHASE PROGRAM

INDICATION OF INTEREST

Name and Address of Borrower ______________________________
____
____
____

Telephone Number ______________________________

Contact Person ______________________________

FmHA Case Number ____________________ Loan Number _____

Outstanding Principal Balance $__________________________

Good Faith Deposit $______________________________

Source of Final Payoff Funds:
(Check more than one, if applicable)

Tax-exempt financing ___

Financing other than tax-exempt ___

Reserves or other non-debt funds ___

The above-named Borrower hereby advises the U.S. Department of Agriculture, Farmers Home Administration (FmHA) that it intends to purchase the FmHA Community Program Loan specified above pursuant to the Discount Purchase Program described in the Fact Sheet attached to the "Dear Community Program Borrower" letter dated March 14, 1988. Together with this Indication of Interest form, the Borrower is submitting a good faith deposit in the amount of $________________, which is equal to 5 percent of the unpaid principal balance of the Borrower's FmHA Community Program loan referenced above.

In accordance with the Discount Purchase Program requirements, the Borrower certified the following information:

1. The funds represented by the good faith deposit are not funds required, under any instrument or agreement evidencing the loan(s) or appurtenant security instrument, to be held in the reserve account by the Borrower.

2. The source of funding will be as indicated above and, on that basis, the Borrower is entitled to a price based on that type of funding.

3. Delinquent loans may be purchased at a discount. However, the Borrower acknowledges that the delinquent amount must be paid in full at par at the time the loan is purchased.

4. The Borrower acknowledges that the Discount Purchase Program expires on July 11, 1988, and, if the Borrower fails to complete the purchase of the Loans by that date, the borrower consents to the application of the good faith deposit specified above against the the final loan installment(s), unless otherwise determined by FmHA.

____
(Name of Borrower)

DATE: ____________________ BY: ______________________________
(Authorized Officer)

ATTEST: (SEAL) ______________________________

OFFICE ______________________________

[ATTACHMENT IV]

FARMERS HOME ADMINISTRATION
DISCOUNT PURCHASE PROGRAM

BORROWER FINAL PRICE ACCEPTANCE FORM

A. NAME OF BORROWER________________________________

B. FmHA CASE NUMBER________________________________

C. CLOSING DATE ________________________________

D. PAYMENT FREQUENCY________
(Annual or other)

E. TYPE OF FINANCING________
(Tax-exempt or other)

F. LOAN NO.________ G. MATURITY DATE ____________ H. INTEREST RATE __________

DETERMINING THE FINAL PRICE AND FINAL PAYOFF:

==

I. UNPAID PRINCIPAL ________________________

J. DELINQUENT AMOUNT ________________________

K. ADJUSTED UNPAID BALANCE (I minus J) ________________________

L. PRICING FACTOR (From the applicable pricing grid) ________________________

M. DISCOUNTED AMOUNT (K times L) ________________________

N. DELINQUENT AMOUNT O. ACCRUED INTEREST
________________- Plus -________________- Equals -________________________

P. SUB-TOTAL (Discounted amount (M) plus the sum of the delinquent amount (N) plus accrued interest (O)) ________________________

Q. PAYMENTS RECEIVED R. PREPAID INTEREST
________________- Plus -________________- Equals -________________________

S. FINAL PURCHASE PRICE (Sub-total (P) minus the sum of payments received (Q) plus any prepaid interest (R)) ________________________

T. GOOD FAITH DEPOSIT (if any) ________________________

U. FINAL PAYOFF AMOUNT (S minus T)

==========================

The above-named borrower has reviewed the information set forth above and accepts the price indicated therein.

In accordance with the Discount Purchase Program requirements, the above-named borrower agrees that if the "other than tax-exempt" discount option is selected, then the funds used to purchase the above loans at a discount will not be obtained, and will not be replaced with funds obtained, directly or indirectly through the issuance of obligations the interest on which is excluded from gross income for Federal income tax purposes.

________________________________ __________
(Name of Borrower) (Date)

________________________________ __________
(FmHa Authorized Official) (Date)

RURAL WATER

The Subcommittee understands that FmHA is in the process of making grants for the purpose of technical assistance to small communities in rural water and waste disposal problems.

Question: Please describe the program to be carried out: the amount of grant(s), communities to be served, type of assistance to be provided, etc.

Answer: The technical assistance and training (TAT) grant program will provide grants to tax exempt private nonprofit organizations. The grantee organizations will assist rural associations, including small cities and towns, that are eligible for FmHA water and waste disposal financial assistance, with water and waste disposal problems. FmHA set aside $1,203,000 from fiscal year 1987 and $1,094,000 from fiscal year 1988 water and waste disposal grant funds for this program.

Question: Does FmHA plan to carry out this program in fiscal year 1989 and if so, at what level?

Answer: Section 306(a)(16)(c) of the Consolidated Farm and Rural Development Act (7 U.S.C. 1926) provides that not less than one percent nor more than two percent of funds appropriated for water and waste disposal grants shall be used for technical assistance and training. Therefore, FmHA would expect to use about one percent of the funds appropriated for water and waste disposal grants in fiscal year 1989 for making technical assistance and training grants.

Question: If FmHA expects any difference in level of activity or amount of grant(s) or number of grant(s) provided, please provide an explanation for the subcommittee.

Answer: The level of activity in amount and number of grants could differ depending on the amount of unobligated funds carried over from the preceding year.

SALARIES AND EXPENSES

You indicate that your salaries and expenses level is a reduction of 975 staff years related to the termination or reduction of new loan authority in Farmers Home Administration programs.

Question: If that reduction of staff years does not occur, what appropriation level for Salaries and Expenses will be needed?

Answer: In order to fund 12,675 ceiling staff years in FY 1989, we will need total funding of $517,109,000 or an increase of $38,268,000 above the budget estimate.

Question: Mr. Clark, how have you achieved the reduction in Salaries and Expenses money for your office provided in the fiscal year 1988 appropriations bill?

Answer: In order to meet the budgetary restraints of a separate appropriation account of $600,000 for my office, I have abolished three positions and transferred three others to the new Appeals Unit established in accordance with the new Agricultural Credit Act. Also, I assigned the two State Directors-at-Large to the States where they were located.

FARM LOAN LEVELS

Question: What are some of the obstacles FmHA encounters in persuading private lenders including the Farm Credit System to provide financing through guaranteed loans to credit-worthy farmers and states where FmHA provides a high percentage of total farm credit through direct loans?

Answer: Commercial lenders and the Farm Credit System are not willing to take on high risk agricultural loans, even with a guarantee. They feel the risk involved is greater than what their lending institutions can bear at this time. Shareholders of commercial institutions are demanding profits. Thus, they are not willing to lend for agricultural purposes. Commercial lenders' interests are more suited to consumer type credit and lending for residential property, as it is easier for them to make and service installment loans with less risk than what an agricultural loan presents.

Question: What will be the impact on direct loan availability of continuation policy loans?

Answer: It is estimated that the continuation policy loan program could result in a ten percent increase for direct loans. To assure funding of this increased demand, we will continue to place heavy emphasis on the guaranteed loan program. Those farmers who have relied upon insured operating funds, and who are now in better financial position, will be encouraged, and assisted by Farmers Home Administration, to obtain guaranteed loans. This will enable Farmers Home Administration to better meet the demand for loans under the continuation policy.

Question: What will be the impact on direct loan credit availability of the write-down feature of the Agricultural Credit Act of 1987?

Answer: FmHA believes the write-down feature of the Agricultural Credit Act of 1987 will allow a number of farmers to obtain credit under the guaranteed loan program, in conjunction with the interest rate buy-down program or through FmHA subordinations. The remaining farmers who receive write-downs will be helped within available resources.

Question: I know that many borrowers under the Farm Credit System have reduced their debt and that total loan volume has declined substantially in the last year or two. Is this the same situation with FmHA borrowers?

Answer: Yes, the situation is similar in Farmers Home Administration. The number of delinquent farmers has decreased from 81,000 or 30 percent of the total number of farm borrowers in fiscal year 1984 to 67,000 or 25 percent of the total number of farm borrowers in fiscal year 1987. Total farmer program obligations have dropped more than 50 percent, from approximately $6 billion in fiscal year 1985 to $3 billion in fiscal year 1987. In fiscal year 1988, through April, Farmers Home Administration has experienced declines in the number of loans made in the following loan programs: 29 percent in direct farm operating loans, 18 percent in guaranteed farm operating loans, and 82 percent in emergency disaster loans, compared to the same time one year ago.

HISTORIC PRESERVATION

Rural America's rich cultural heritage is being rapidly destroyed by a variety of forces. The recent burning of a North Dakota farm house by FmHA demonstrates both how fragile this heritage is and the important role of FmHA, and the Agriculture Department, as stewards of this rural heritage.

Question: What FmHA procedures are currently in place to ensure compliance with the National Historic Preservation Act?

Answer: It is Farmers Home Administration's special policy in FmHA Instruction 1940-G, "Environmental Program" to identify any properties that are listed in, or may be listed in the National Register of Historic Places and are located within the project's area of potential environmental impacts. Consultations are undertaken with State Historic Preservation Officers and the Advisory Council on Historic Preservation in order to determine the most appropriate course of action for protecting such identified properties or mitigating potential adverse impacts to them. Additionally, FmHA Instruction 1955-C "Disposal of Inventory Property" provides instructions on when the State Historic Preservation Officer is to be contacted on historic sites. It also provides the criteria for FmHA to make a determination if the property is listed or is eligible for listing in the National Register of Historic Places.

Question: What other action can FmHA take to protect historic resources?

Answer: FmHA plans to place special emphasis on these sections of our instructions in upcoming training meetings which will be conducted with FmHA State Office personnel. They will be requested to relay the information to all District and County Offices in their State.

QUESTIONS SUBMITTED BY SENATOR BUMPERS

Question: Recently, news reports carried the story that the FmHA was going to "write off" about $7 billion of its loan portfolio. The story was highly inaccurate, but it caused a great outcry from many across the country. Knowing this, why have you refused to issue a clarifying new release?

Answer: The reporter who wrote the New York times article evidently relied on data contained in testimony written last summer. Therefore, the conclusions he drew from those numbers were no longer accurate. In responding to media and Congressional inquiries about this story later, FmHA officials explained that the conclusions were those of the reporter only, and the figures used in the story could not be verified by Agency data. Therefore, issuing a "clarifying news release" never became necessary.

Since that time, more recent data has become available, and current official Agency estimates about potential losses and deferrals have been released through Congressional testimony.

HOUSING GRADUATION

Question: The farm labor housing program has been very important to Arkansas, but unfortunately the FmHA changed in mid-stream its interpretation of graduation requirements. Congress attempted to resolve this problem late last year. What is the status and how have cases in Arkansas been affected?

Answer: FmHA has not recently changed its interpretation of graduation of labor housing and multifamily housing borrowers when it is determined that graduation can take place at reasonable rates and terms to permit the borrower to continue to operate the housing for the population for which it was intended. Ordinarily, a borrower would not be reviewed for eligibility to graduate until the loan was 15 or 20 years old, and graduation reviews would be conducted biannually thereafter. Where restrictive-use provisions apply, they would remain in the conditions of release after a graduation. An OIG audit found a situation in Arkansas in which they believed a labor housing borrower had the financial capability to graduate the loan and maintain the housing for its initial purpose, so FmHA was directed to pursue this graduation.

Any Prepayment, whether through requested graduation or initiated by the borrower, would have to follow all regulations regarding prepayment and restrictive-use provisions. There are regulations and restrictions currently in place and additional ones written into the recently passed Housing Act, which will go in effect on May 22, 1988.

In the case of the labor housing loans in Arkansas, FmHA has determined that we cannot be certain that the project could be maintained for the subject population if the loan was graduated. We have, therefore, decided not to pursue a forced graduation in this case.

AGRICULTURAL CREDIT ACT OF 1987

Question: I was pleased to read that the FmHA agreed to pursue the spirit of the Agricultural Credit Act of 1987 in offering loan restructuring to borrowers with troubled loans. When will the FmHA publish regulations?

Answer: The Agricultural Credit Act of 1987 requires numerous changes in the Farmers Home Administration regulations and the way we do business with our farm borrowers. We expect to publish the proposed rules in the near future with a 30 day public comment period. Final rules will be published after the comment period.

WATER AND WASTE DISPOSAL FUNDS

Question: Almost 1/10 of all the applications for water and sewer loans and grants filed in the U.S. are in Arkansas. Does the FmHA allocation to Arkansas reflect this situation? How seriously will the further cuts you propose in water and sewer grants push back the completion of important work.

Answer: FmHA's water and waste disposal loan and grant funds are allocated by a formula. The formula gives equal weight to the State's percentage of National rural population and the State's percentage of National rural population with incomes below the poverty level. We believe that this formula equitably allocates water and waste disposal loan and grant funds to all states. The FmHA National Office maintains a reserve that may be used to give the states additional funds on a project by project basis when their initial allocation of funds has been used.

Question: The Kimzey water project in Arkansas is a large project that cannot be satisfactorily phased. Necessary funding will easily exhaust the normal amount of funds allocated to Arkansas, and it will take a special commitment from the National office to get it funded. Can Arkansas expect help from the National office on this critically needed project in FY89?

Answer: The Arkansas FmHA State Director has requested funds from the National office for part of the Kimzey water project. The State Director's request will be considered for funding along with all others on hand. FmHA will do everything possible within its authorities and available funds to provide assistance on the Kimzey project.

Question: Knowing of the requirements of the Clean Water Act and of EPA sewer wastewater regulations, how does your request for sewer and water grants and loans square with the dire needs of small, poor, rural communities?

Answer: The Administration recognizes the need to continue financial assistance to low-income communities to aid their efforts to meet Federal water quality and drinking water standards. The fiscal year 1989 budget request reflects the intent of the Administration to limit the growth of Federal outlays and reduce dependence on the Federal Government as a supplier of credit. Rural communities will rely on the private sector, State and local programs, and other Federal programs to meet the requirements of the Clean Water Act.

OPERATING FUNDS

Question: In past years, when a State ran out of OL money for any of the first three quarters, the National Office made the next quarter's funds available. This kept the loan process functioning smoothly, and it allowed the State Offices to avoid asking for funds on a time-consuming case-by-case hardship basis until the next quarter rolled around. What possible reason could the FmHA have for changing the policy to one that will not allow for a roll-over of funds?

Answer: Fourth quarter allocations were made available to the states on April 7, 1988. This early release of fourth quarter insured operating funds was accomplished in recognition of the needs of FmHA applicants during the Spring planting season.

Question: Will Arkansas have enough direct OL funds for fiscal year 1988, based on state projections? If not, how will you help to make necessary loan funds available?

Answer: Arkansas's fourth quarter insured operating allocation has been released for immediate use. As we are sensitive to each State's pressing need for agricultural credit, every effort will be made to provide funding in Arkansas and elsewhere in the Nation.

Question: Do you project that the National office will retract again a significant amount of OL funds allocated to the states for FY 1988, as it did last year?

Answer: The allocation process for initial distribution of loan funds considers a number of variables for arriving at each state's allocation. The process is not a perfected science. There are numerous variables that affect actual demand for OL funds on a state-by-state basis. As the need arises to redistribute loan funds to fulfill the needs of all states, pooling and redistribution of funds are done. We anticipate that this action will be necessary in fiscal year 1988.

Question: Year after year, the funding of a significant number of farmer program loans are not made until late summer or worse. Does the FmHA monitor this situation? How does the FmHA plan to improve? Are county offices being computerized? What is the status of any computerization program in Arkansas?

Answer: Yes, we do monitor as to when the loans are obligated. Our reports indicate a majority of the loans are obligated from March through June. As you probably know, states are funded quarterly. Ninety percent of the funding is allocated in the first three quarters. It is the state's responsibility to immediately request additional funds when needed. All of our State, District, and County Offices are computerized. All advances can be generated through the automated data processing system. Normally, it takes eight to ten days from the date of request for County Offices to receive loan checks from National Finance Office.

Question: You have championed the policy of forcing farmers to switch from using direct OL funds to guaranteed loans. Yet, last year the National Office seriously retarded the effort in Arkansas by cutting off guarantee authority after assuring that this would not happen. You left a lot of people out on a limb. Can you assure that this won't happen again? Arkansas is getting $1 million less in guarantee authority in fiscal year 1988 than the year before. Why?

Answer: The guaranteed operating loan allocation for Arkansas in fiscal year 1987 was $39.7 million, while obligations for the year totalled $34.3 million. The guaranteed operating loan allocation for Arkanas in fiscal year 1988 is $38.7 million with additional funding available from the National Reserve, if needed. The allocation for Arkansas in fiscal year 1988 was based, as it was in fiscal year 1987, on the number of farmers in Arkansas, as well as their income and assets. Thus, $1 million less was authorized for Arkansas in fiscal year 1988 as compared to fiscal year 1987.

Question: The making of guaranteed loans in Arkansas this year has been hampered because of FmHA instructions concerning section 613 of the Agricultural Credit Act of 1987 involving the 60 day foreclosure prohibition language. Can you expound on this problem? What is being done by the FmHA?

Answer: FmHA is not aware that section 613 of the Agricultural Credit Act of 1987, involving the 60 day foreclose prohibition language, has been causing a problem in Arkansas or any other state. This requirement is statutory; and immediate implementation was required by Law. Our Arkansas officials report they have not received any inquiries or complaints concerning section 613 of the Agricultural Credit Act of 1987.

QUESTIONS SUBMITTED BY SENATOR HARKIN

DEBT RESTRUCTURING

I would like to ask a few questions about the implementation of certain provisions of the Agricultural Credit Act of 1987. The intent of this legislation was to help our family farmers continue to farm and to strengthen rural communities while prescribing good financial management for FmHA. I am convinced that the provisions of the Act make good sense for rural America and also make good business sense. I therefore expect that the regulations that are soon due from your agency will be in keeping with the intentions of Congress and the spirit of the Act.

I am very much interested in your agency's implementation of the debt restructuring provisions of the Agricultural Credit Act of 1987. Please provide the following:

Question: How many notices of the right to apply for debt restructuring were sent to borrowers?

Answer: Notices of the right to apply for debt restructuring and income release were sent to 11,904 borrowers in compliance with Section 611 of the Agricultural Credit Act. The notices were sent only to borrowers whose accounts had been accelerated between November 1, 1985 and May 7, 1987, but had not been foreclosed on or liquidated. All farmer program borrowers that are at least 180 days delinquent will receive notice of their primary loans servicing options when the regulations implementing the remainder of the Act are issued.

Question: What is the number of responses you received to the debt restructuring notices and the number of applications you received for such treatment?

Answer: Farmers Home Administration received 1,614 applications for debt restructuring and income release in response to the 11,904 notices sent to borrowers whose accounts had been accelerated between November 1, 1985 and May 7, 1987 but had not been foreclosed on or liquidated.

Question: How many borrowers remain who are eligible for debt restructuring, but who have not applied for it?

Answer: Our records indicate that there are approximately 118,000 farmer program borrowers who are presently delinquent. Historical records indicate that approximately 37,000 of these accounts will no longer be delinquent by the time the Farmers Home Administration regulations are published. It is expected that almost all of the remaining 81,000 borrowers will be 180 days or more delinquent by that time and will receive notice and be given the opportunity to apply for consideration under the Farmers Home Administration primary loan servicing programs. The 81,000 borrowers include the 1,614 accelerated borrowers that have already applied for debt restructure and income release.

Question: What is the amount of debt represented by those who have applied for debt restructuring and by those who have not applied for restructuring.

Answer: The Farmers Home Administration debt owed by those borrowers who have applied for debt restructuring and income release is estimated to be approximately $200 million. Debt owed by those borrowers who have not applied is estimated to be $15.8 billion.

MEDIATION EFFORTS

As you know, my state has an effective and successful program for mediation between farmers and lenders of problems relating to loans. This program served as the model for the mediation provisions of the Act. It is my belief that mediation saves taxpayer and borrower money and reduces the personal hardship of financial distress. I am therefore looking forward to the issuance of FmHA regulations regarding mediation with the expectation that they will be consistent with the spirit of the Act in utilizing this method of resolving problems regarding loans.

Question: Can you tell us how many states have now been certified as having qualifying mediation programs under Title V of the Act? What are these states?

Answer: Seven states have now been certified on an interim basis as having qualifying mediation programs under Title V of the Act. They are Iowa, Minnesota, Mississippi, Montana, Oklahoma, Wisconsin, and Wyoming. The interim certifications were issued pending issuance of regulations to implement the certification process and matching grant program.

Question: How many more states do you expect to qualify?

Answer: Besides the 8 states that have requested certification, we have received an indication of interest from 17 other states as well as the Commonwealth of Puerto Rico and the Territory of Guam. We anticipate that 7-10 additional states will request certification of their agricultural loan mediation programs during fiscal year 1989.

Question: What steps have you taken to encourage states to seek certification of their mediation programs?

Answer: We have taken several steps to encourage States to seek certification of their mediation programs. Shortly after enactment of the Agricultural Credit Act of 1987, we sent a letter to the governor of each state, the Commonwealth of Puerto Rico and Territory of Guam to inform them of the program and the requirements for certification. Also, we have met with representatives of state governments to discuss the certification process, offered to review proposed state legislation to establish a program, and provided additional information for interstate contact people where programs already exist and have been certified.

Question: What is the present status of mediation efforts between FmHA and its borrowers?

Answer: Where a program has been certified, we encourage participation of our borrowers

Question: Do you now have regulations or policies prescribing mediation? When do you expect to issue regulations under the Act concerning mediation?

Answer: A proposed rule to implement the provisions of the Agricultural Credit Act of 1987, including the State Mediation Program was published April 1988 in the Federal Register for public comment. We plan to issue the final rule to implement the Act in June 1988.

Question: Can you describe the direction and shape of the mediation efforts that FmHA will undertake?

Answer: We have not received an appropriation for mediation programs, however, we will continue to certify states. If and when funds become available, states which have been certified as qualifying states will be able to request and be considered for a matching grant.

ISSUANCE OF FmHA REGULATIONS UNDER THE ACT

Question: To my knowledge, FmHA has not yet issued any proposed regulations other than those pertaining to county committies under the Act. Since FmHA is required to issue final regulations by early June 1988 implementing all provisions of the Act, when does FmHA expect to publish its proposed regulations? Does FmHA expect to meet its June deadline for the issuance of the final regulations implementing the Act?

Answer: Although the Farmers Home Administration fully intends to carry out the spirit and intent of the Agricultural Credit Act of 1987, there are a number of changes in our regulations that need to be made. We anticipate publishing the proposed rules in the near future, with a 30 day public comment period following. Final rules will be published after we assimilate the comments we receive during the public comment period concerning the proposed rules.

GUARANTEED LOAN DEMONSTRATION PROJECT

Under the demonstration project provided by the Act eligible borrowers may purchase land held in inventory by the Farm Credit System at a reduced interest rate and with less stringent downpayment requirements through cooperation between the FmHA and the Farm Credit System. I have a few questions about the implementation of this program.

Question: Has FmHA made any loans or considered any borrowers for the guaranteed loan program under the demonstration project designed to assist in purchasing inventory land held by the Farm Credit System?

Answer: No, Farmers Home Administration has not, as yet, implemented the demonstration project. Regulations implementing this project must be published as final rule in the Federal Register before any loans can be made.

Question: What has FmHA done to implement the demonstration project and to publicize its availability?

Answer: Regulations establishing the guidelines have been developed and are now in the clearance process to be published as proposed rule for public comment. As soon as the comments are received, they will be reviewed and incorporated for final rule making. The Agency has developed a Memorandum of Understanding with the Farm Credit Administration regarding the demonstration project, and has issued a letter to its field staff advising them of the provisions of the project. When the final regulations are published, Farmers Home Administration will issue a sample news release to each field office for distribution to the local news media informing the public of the demonstration project.

Question: When does FmHA expect that the funds to be used for the demonstration project will finally be fully disbursed?

Answer: The success of the demonstration project will depend upon the demand by eligible Farmers Home Administration farm ownership applicants to purchase Farm Credit System inventory farms.

We have no means of forecasting this demand. We assure you adequate funding for the purchase of these inventory farm properties will be available during the time frame the demonstration project is in effect.

OMB SUSPENSION AND DEBARMENT DIRECTIVES

As you know, OMB has issued a directive regarding debarment and suspension that will result in the creation of a nationwide computerized "blacklist" of persons barred from participation in federal programs. While I am concerned about eliminating and preventing fraud or dishonesty involving the Government, I also am concerned about possible undesirable effects of the OMB directive.

Question: Will FmHA place on this blacklist the names of borrowers who have defaulted on FmHA loans through no fault of their own?

Answer: The common rule published by OMB regarding nonprocurement debarment and suspension is intended to identify applicants for Government programs who have not fulfilled their obligations in their dealings with other Federal agencies. As we understand the rule, these parties would be provided due process rights at the time they were proposed for debarment and would have an opportunity to resolve their differences with the other agency as a part of the application process for additional Government assistance. Now that governmentwide rules are finalized, each department and agency will be developing regulations and USDA regulations will be published in the next few months. Farmers Home Administration (FmHA) has not begun to draft any regulations on this issue.

Question: Has OMB taken a position whether such borrowers should be placed on the blacklist?

Answer: The common rule published by OMB states failure to pay a debt is a cause for debarment. There is also a lengthy notice and appeal process which would give FmHA the opportunity to consider the borrower for the servicing options.

Question: How will the OMB blacklist affect the debt restructuring and mediation provisions of the Agricultural Credit Act of 1987?

Answer: Our preliminary review of the OMB common rule indicates to us that this rule will not affect the restricting or mediation provisions of the Agricultural Credit Act of 1987. We are required and will consider our borrowers for these servicing options.

Question: Considering the significant role that Government programs play in the agricultural economy, what steps will FmHA take to ensure that individuals are not erroneously blacklisted and barred or suspended from FmHA or other Government programs?

Answer: The common rule published by OMB appears to contain a notification and appeal provision. This process should identify borrowers who have been erroneously considered for debarment as well as identify borrowers whose delinquency may be eliminated through consideration of the servicing options.

QUESTIONS SUBMITTED BY SENATOR REID

Question: How many personnel are typically assigned to a State Office?

Answer: As of February 1988, we had 1,605 permanent full time and 24 permanent part time employees in 46 state offices for an average of about 35 per office.

Question: What specific duties are performed by these personnel?

Answer: Their duties are as follows:

State Director - Reports directly to the Administrator. They are responsible for the overall administration of the Agency farm, housing and community facilities loan programs and related administrative functions within the State. They carry out the policy directions of the Administrator.

Program Chiefs - These are State senior loan specialists who report to the State Director. They oversee the State's loan programs. They provide guidance to the District and County Personnel on program isssues. In addition, they perform various oversight reviews of loan programs for which they are responsible.

Program Specialists - Work directly with the Program Chiefs. They review loan dockets and perform various duties related to their loan or grant program areas.

Administrative Officer - The senior administrative specialist that reports to the State Director. They are responsible for the administrative funds within the State. Activities include personnel, contracting, budgeting, ADP activities, oversite and record keeping.

Engineer/Architect - These professionals provide expert assistance in the review of loan dockets which involve environmental issues, historic preservation, handicap needs, and construction plans. They monitor activities and provide guidance on technical issues to the Program Chiefs and State Director.

Program Review Assistants - These persons travel throughout the State. They assist in the training of new field office personnel, provide oversight in office operations and make recommendations for improvement in operations and loan administration.

Technical/Clerical - These persons carry out day to day administrative duties including the handling of routine loan packages. Some of the people are specialists in particular areas, for example, Personnel or Business Services activities.

Question: Are there examples of States with relatively small agricultural and rural populations where the State Office has fewer personnel? If so, how does the performance of the small State Offices compare to that of typical State Offices?

Answer: Yes, as of February 1988, States like Alaska and Hawaii had 10 and 15 employees respectively. Wyoming had 18; Massachusetts and Utah had 23; Colorado had 24; Montana and New Mexico had 25;

North Dakota, Vermont, and Idaho had 26 and so on. Now the number of personnel in the State Office is not determined by Washington. It is up to the State Director who manages his State within a staff year ceiling for all his offices. Some States are combined with neighboring States since there is not enough workload to justify separate operations. Combinations include: Massachusetts, Connecticut and Rhode Island; Vermont and New Hampshire; Delaware and Maryland; and Utah and Nevada.

We really do not have a "typical" State Office. We have small ones, like Alaska, Hawaii and Wyoming, some medium size such as Kansas, Minnesota and Florida and so on, up to large ones like Texas which has 67 employees. But most are unique. We feel they all perform well for their particular situation.

Question: What is the average annual cost of operating a State, District and County Office?

Answer: In fiscal year 1987 we spent $71,767,000 to operate 46 State Offices for an average cost of $1,560,152. For District Offices, the cost was $55,777,000 for 266 offices, an average of $209,688. County Offices cost $261,624,000 for about 1,934 offices, an average of $135,276 per office.

Question: What would be the administrative and budgetary effects of combining the operations of a District Office into a State Office?

Answer: In some cities where we have a State Office we also have a District Office and they sometimes are located near each other or in the same building. The administrative and budgetary effects are generally minimal. We often co-locate combine District and County Offices where feasible.

QUESTIONS SUBMITTED BY SENATOR COCHRAN

BILLION DOLLAR WRITE-OFF

Question: Mr. Clark, it has been widely reported in the press that Farmers Home will probably have to write off billions of dollars in delinquent farm loans this year under the new Agricultural Credit Act we passed last year. Some of my constituents, especially those who have had to struggle, but still paid off their FmHA debt, tell me they're not too happy about this. Is it true that you'll be writing off billions in bad loans; and if so, how much do you expect to write-off?

Answer: Our current estimates are that the Farmers Home Administration will be writing off between $8 billion and $9 billion over the next several years. The Agricultural Credit Act of 1987 requires us to reduce the debt of some delinquent borrowers to the recovery value of their collateral, if repayments would at least equal revenues from foreclosure. We estimate that, in the first year, about $2.1 billion could be written down as a direct result of this requirement.

Additionally, another $6.7 billion in debt held by borrowers who won't cash-flow, even with a write-down, will be lost. This represents bad debt that can never realistically be expected to be recovered by the Farmers Home Administration. While the Act may be responsible for accelerating the pace of these write-offs, it should be realized that this is a necessary adjustment the Agency is required to make to purge our portfolio of uncollectible debt. We need to concentrate on those farm operations that can still remain viable in today's agricultural economy.

DELINQUENCIES

Question: What is the total amount of debt owed your agency by delinquent borrowers?

Answer: Delinquent borrowers owe about $14 billion, of which $9.5 billion is currently delinquent.

FmHA AND FCIC PROGRAMS

The programs of the Farmers Home Administration and the Federal Crop Insurance Corporation are very important to our farmers. The FmHA administers a broad range of loan and grant programs, and crop insurance is the government's primary source of disaster assistance for farmers.

The good news in the 1989 budget is:

1. Farm operating loans of the Farmers Home Administration would be increased from $3.1 billion to $4.0 billion in 1989;

2. For the first time in several years, budget requests are included for the water and waste disposal loan and grant programs, the Business and Industrial loan guarantee program, and the community facilities loan programs of the FmHA; and

3. Expansion of the Federal Crop Insurance program will continue. It is expected to provide coverage for 61 million acres in 1989, up from 58 million acres in 1988.

The bad news is:

1. The budget proposes that the rural housing loan and grant programs be replaced with a housing voucher program in 1989.

2. Federal Crop Insurance loss ratios — the ratios of income over indemnities — have been unfavorable for several years now. Indemnity payments for fiscal years 1982 through 1987 have exceeded premium income by more than $1 billion.

These are all activities and programs of tremendous interest and importance to various parts of the country, including my State of Mississippi.

The Subcommittee will be reviewing these program requests very carefully as we proceed in this appropriations process.

QUESTIONS SUBMITTED BY SENATOR MCCLURE

EMERGENCY DISASTER LOANS

In the northwestern United States we are expecting another year of drought conditions. Some counties were declared eligible for emergency loans in 1987 and more should be anticipated for 1988. The Congressional delegations and the Department of Agriculture have made an effort to insure that farmers know about the requirement that they have crop insurance coverage to be eligible for emergency loans.

Question: Are you aware of any emergency loan denials due to the lack of crop insurance coverage? How many and where have these occurred?

Answer: Applicants who suffer natural disasters in areas where crop insurance is available may not be able to get emergency loan assistance, if their management decision was to not acquire crop insurance. A crop(s) that suffers disaster losses for which crop insurance was available, but was not purchased, will not have such losses counted when determining eligibility for EM loan assistance. The fact that a farmer did not elect to carry insurance on all crops for which crop insurance was available, does not in itself make the individual ineligible for FmHA EM loan assistance. However, when insurance is purchased for any single crop, the total acreage of that crop must be insured. When an applicant plants two crops in the same enterprise and both crops have crop insurance available, but only one crop was insured, other things are considered in determining loan eligibility, e.g., the gross dollar loss on the crop not insured is considered as zero, and the gross dollar loss on the insured crop is reduced by the amount of the FCIC indemnity payment. If the gross dollar loss for the total enterprise, after deduction of any insurance indemnity payment is 30 percent or greater, the applicant may qualify for an emergency loss loan. When determining the maximum amount of an EM production loss loan, all crop indemnity payments are subtracted from the disaster year's gross dollar loss and the difference is reduced by 20 percent to arrive at the maximum loss loan. The maximum EM production loss loan represents 80 percent of the gross dollar loss, after deductions for insurance and any other compensation received.

The Agency does not capture data indicating the number of applications for emergency loans that were turned down because the producer did not have crop insurance; or the number of farmers with crop insurance who applied for a disaster loan and were approved.

During fiscal year 1987, of the 5,486 emergency loan applications on hand and received, 2,737 or 50 percent were closed; 1,419 or 26 percent were rejected; and 1,330 or 24 percent were withdrawn or expired.

Question: In your explanatory notes you note the reason for the reduced request is the crop insurance coverage? Is this based on an analysis of past situations with new rules, or how did you determine this level of funding? If a detailed analysis exists, would you provide a copy?

Answer: In fiscal year 1985, Farmers Home Administration had a surplus of program funds available mounting to $109 million. In fiscal years 1986 and 1987, we had surpluses of $326 million and $181 million, respectively. In fiscal year 1988, although $588 million is available through appropriations, $100 million reflects the anticipated level of emergency disaster loans which may be required. Through April 13, 1988, we have obligated $14 million.

The emergency disaster funding level is based primarily on past usage of funds. We believe the declining usage of emergency loan funds is due to: a general reluctance of the agricultural community toward borrowing; the implementation of required crop insurance coverage; and the availability of advance Agricultural Stabilization Conservation Service payments.

Question: What happens if your request is inadequate? Do you have an alternative source of funding proposal?

Answer: In case a need arises for increased emergency disaster loan funds, Farmers Home Administration may request a supplemental appropriation. Also, the Secretary of Agriculture may utilize the interchange authority cited in 7 U.S.C. 2257. However, agencies are not allowed to transfer more than 7 percent from the donor fund appropriation. Since federal crop insurance is available to farmers for most crops, in virtually all agricultural counties in the country for losses caused by natural disasters, we believe current funding levels are adequate, and we do not anticipate the need for a supplemental appropriation.

RURAL DEVELOPMENT INITIATIVE

When Secretary Lyng testified before this subcommittee in February, he mentioned a Rural Development Initiative and included $1 million for a National Commission on Agriculture and Rural Development in the FY 1989 budget request. We have been asked to appropriate Extension Service funds for new programs to relieve the rural ecomonic crisis ($10 million); to improve agriculture competitiveness ($10 million); and to begin rural revitalization programs ($2 million). Yet, the request for funding for the Rural Development Insurance Fund for FmHA shows a $126 million reduction. The Rural Water and Waste Disposal grants show a $34 million reduction. Rural Community Fire Protection Grants have been eliminated.

Question: Does there seem to be an inconsistency there to you? If not, why not?

Answer: The fiscal year 1989 budget request delineates the need for program services and the Agency's priorities. The FmHA will be an active and willing associate, working with rural communities and other USDA agencies to address these needs. The budget also reflects the intent of the Administration to limit the growth of Federal outlays and reduce dependence on the Federal Government as a supplier of credit.

CIRCUIT RIDER

I am particularly interested in FmHA's Circuit Rider program which provides technical assistance for rural water systems. The FY 88 budget provided that not more than $2.675 million of the Salaries and Expenses appropriation for FmHA shall be made available for contracting with the National Rural Water Association or other equally qualified national organizatiom for this circuit rider.

Question: How much of this amount has actually been provided for the Circuit Rider program in FY 88?

Answer: The FmHA fiscal year 1988 circuit rider contract with the National Rural Water Association is $2,520,416.90.

Question: What is the status of funding for this program in FY 89?

Answer: The fiscal year 1988 contract contains an option for fiscal year 1989. To maintain the current level of service, the cost will be about $2.9 million.

FmHA STAFFING

It would seem that the proposed changes in FmHA programs will reduce both farm real estate and rural housing programs. The proposals call for reduced direct loans and more guaranteed loans. Numerous programs are slated for termination or partial combination into a single program.

Question: With all these efforts to increase efficiency and reduce program costs, why is your staffing reduction relatively small?

Answer: Most of our staff year efforts are directed towards servicing our outstanding loans which total over 1.6 million. We are increasing our efforts on loans servicing while we are reducing loan making. A reduction of 975 ceiling staff years from a base of 12,675 is certainly a sizable reduction.

QUESTIONS SUBMITTED BY SENATOR SPECTER

Mr. Clark, in fiscal year 1987, the Farmers Home Administration had 22,500 outstanding loans for farm, rural housing, and community programs in Pennsylvania. These loans totalled $1 billion, with $37 million of the outstanding portfolio loans classified as delinquent. In this context, please provide answers to the following questions.

Question: What impact will the Agriculture Credit Act of 1987 have on the availability and affordability of farm credit for our nation's farmers? To what extent will increased access to loans and economic development improve the long term prospects for fiscal solvency in some of the hard-hit agricultural regions?

Answer: First let me say, the Agricultural Credit Act of 1987 does not change the Agency's role of being the lender of last resort. Farmers Home Administration will continue to place heavy emphasis on the guaranteed loan program. County Offices will be assisting applicants and lenders in every way possible, including the use of operation assist, to assure maximum utilization of the guaranteed operating loan allocation. Subordinations will also be granted by FmHA to the fullest extent possible. This will afford direct loan borrowers a better opportunity to obtain their needed production financing from private lenders. As far as the Act itself is concerned, we believe it will have a significant impact on the availability of credit for our nation's farm borrowers. Eligible borrowers will be able to obtain release of normal security income up to $18,000 over a period of up to twelve months for essential household and farm operating expenses. Also, the interest rate buydown program for guaranteed loans is extended through fiscal year 1993. In addition, debt restructuring and loan servicing provisions for delinquent farmer program loans have been modified to the maximum extent possible, consistent with avoiding losses on such loans and ensuring that borrowers are able to continue farming. The Agency will also reserve loan funds for farm ownership loans for use by members of socially disadvantaged groups. Also, procedures will be developed for the facilitation, administration and promotion of secondary market operations dealing in the Agency's guaranteed portions of farmer program loans.

We believe the regulations and options we already have in effect, combined with the provisions of the Agricultural Credit Act of 1987, will allow the infusion of new money into economies of hard-hit agricultural regions, thus allowing farmers to pay existing creditors and purchase machinery, feed, seed, fuel and fertilizer to reactivate lethargic rural economies.

Question: What action is being taken to ensure that Pennsylvania small farmers have the same access to capital as the larger farms and small businesses? What is the percentage of FmHA loans to small farmers?

Answer: The Consolidated Farm and Rural Development Act, as amended, mandates that all Farmers Home Administration borrowers be owners or tenants not larger than operating family-sized farms after the loan is closed. Therefore, all Farmers Home Administration monies in Pennsylvania, as well as nation-wide, are loaned to family size farmers. By statute, the county committee determines the eligibility of an applicant through April 13, 1988, the average size direct farm operating and direct farm ownership loans are $40,100 and $88,200 respectively. These figures clearly indicate that all of our loans are being made to small farming operations.

FEDERAL CROP INSURANCE CORPORATION

QUESTIONS SUBMITTED BY SENATOR BURDICK

COMPLIANCE OPERATIONS

Question: Last year, when GAO conducted a study of 134 claims submitted by reinsurance companies in five states, they found an error rate of approximately 95 percent for loss adjustments. In addition, GAO found that 31 percent of the $9,400,000 in claims from reinsured companies should not have been paid--about $1 out of every $3 paid.

GAO criticized the FCIC on the types of problems that resulted in overpayments by saying many were "so obvious they appeared to be intentional."

Since then, I understand that FCIC has undertaken major Compliance Division changes. How many personnel are now working on compliance problems as compared with last year?

Answer: The Compliance operation is authorized 60 permanent full-time staff-years plus 1.2 staff-years in overtime. The present staff, as compared to last year, is as follows:

OFFICE	CURRENT F.Y. 1988	F.Y. 1987
Division Office	4	3
Washington, D.C. Branch	11	9
Kansas City, MO Branch	16	14
Division Total	31	26

Question: What new quality control efforts are being put into practice at FCIC that promise improved performance in the loss adjustment area? Will automation of your compliance activities help?

Answer: FCIC is continuously striving to improve and strengthen quality control procedures and methods. FCIC is using automation to isolate and scrutinize identification of policyholders who have high loss ratios, high frequency of loss, and those with questionable causes of loss and loss severity. FCIC also continues to verify previous years' production and loss history with information on establishment of yield history. These automated activities will certainly assist, but continued emphasis will be placed on field reviews, assuring loss adjustment is conducted to acceptable standards of FCIC.

Question: What sampling techniques will be put into place to encourage enforcement?

Answer: FCIC is increasing the percent of random policy reviews completed to validate review findings and enhance disciplinary and administrative actions for cases of non-compliance. Sampling procedures are being reviewed to assure that appropriate confidence levels are achieved in the review process to enable appropriate follow-up actions. FCIC has also established a working group to pursue the establishment of performance standards to measure the individual performance of each company and identify when actions are needed. FCIC is moving in the direction of performing more concentrated reviews on individual companies and processing offices.

FCIC'S ROLES OF PROMOTING AND REGULATING CROP INSURANCE

Question: FCIC has two distinct roles: one of promoting and the other of regulating the crop insurance industry. Does FCIC management see a conflict of interest in these dual roles?

Answer: The FCIC's role in promotion is limited to working with its partners to develop ways to improve their marketing efforts. The regulation of the industry focuses on the implementation of, and adherence to, the requirements of the contracts to which each company in the two systems has subscribed. The dual task of promoting and exercising oversight for program operations for crop insurance do not conflict. Like all insurance programs, the crop insurance program separates promotion and sales from loss adjustment and claims review.

Question: What does FCIC management think about the feasibility of having an independent body monitor and review the loss adjustment function and other activities of reinsured companies?

Answer: To eliminate the appearance of any conflict within the Program Administration area of the FCIC, which encompasses both the marketing and compliance activities related to reinsured operations, we have announced our intention to separate those functions by establishing an Assistant Manager for Compliance reporting directly to the Manager. We do not believe that any advantage would be gained through the creation of an independent audit agency. It would appear that such a proposal would simply duplicate a responsibility which, even were such an agency to exist, would still be required to be performed by the FCIC as an element of its contract administration functions. The Compliance organization will operate independently of the operational elements of the FCIC, both with regards to FCIC insurance operations and relative to reinsured company administration. In this scheme, the independence of the reviewers and their cooperative work with various other government review and audit agencies is assured.

1989 BUDGET RECOMMENDATION FOR REINSURED COMPANIES

Question: The 1989 Budget proposes an increase of $14,399,000 for the Administrative and Operating Expenses for reinsured companies. This is the largest single increase in the budget proposal.

Part of this amount, $9,151,000, is recommended due to additions to the Reinsurance administrative expense reimbursements necessary as a result of anticipated premium to be handled by reinsurance companies. What is the "increased premium" expected to be handled by reinsured companies in 1989?

Answer: The premium expected to be handled by the reinsured companies in 1989 is $360 million; this represents an increase of $20 million over 1988.

Question: What type of expenses would be reimbursed based on this increase? (For the record, please provide the type of expenses and the amount of each as assumed in the Budget totals.)

Answer: The type of expenses reimbursed would not change. The reinsured companies market and fully service, including loss adjustment and claim processing, policies of crop insurance and are at risk on such policies. Beginning with crop year 1985, the reinsurance agreement established a single rate of reimbursement; therefore, it is not budgeted by type of expense and amount related to that expense. It is budgeted on the amount of premium to be handled by the reinsured companies times the total reimbursement rate.

Question: What types of services and good are assumed in the $5,257,000 proposed for non-discretionary non-salary costs?

Answer: The amount proposed for non-discretionary non-salary costs reflect an increase for a Federal non-defense non-pay purchases deflator as provided by OMB. This factor is applied to all costs that are non-salary related.

FEDERAL CROP INSURANCE CORPORATION FUND

Question: The 1989 Budget includes a significant reduction in the appropriation requested due to a change in the accounting procedures to be followed. Do you believe that by following generally accepted accounting principles, FCIC will benefit?

Answer: Yes. Obtaining the subsidy appropriation in advance is a benefit to the Corporation because it provides the Corporation with funds which, when earned, are available to pay indemnities. In the past, the Corporation received subsidy appropriation based on the prior crop year, after most losses were incurred.

Question: Will it be easier for Congress to determine the strength of the fund under these new procedures? If so, in what ways?

Answer: These new procedures do not make it easier to determine the strength of the FCIC Fund. When the premium subsidy appropriation is received, it is recorded as cash, in its entirety, even though it can only be used to pay indemnities as subsidy is earned. Subsidy is earned as premium receivable is recorded, and only earned subsidy and premium collected may be used for payment of indemnities; therefore, the Corporation could appear to have a strong cash position and be unable to pay indemnities to producers.

Question: Of significant note is the fact that no funds are requested for interest expense reimbursement to the Treasury or to the CCC. What is the reason for this noticeable deletion from the Budget proposal?

Answer: Interest expense reimbursement is only requested when there has been an interest expense in the prior year. The Corporation does not plan to borrow funds from Commodity Credit Corporation in fiscal year 1988, and the balance in the FCIC Fund should remain above $113 million. The Corporation only pays interest to Treasury when our FCIC Fund balance falls below the $113 million owed Treasury.

Question: How are outstanding losses treated with respect to interest payments due?

Answer: The FCIC pays simple interest to producers, which is computed on the net indemnity, from and including the 61st day after the date the insured signs, dates, and submits a properly completed Claim for Indemnity form. The interest rate is that established by the Secretary of the Treasury under Section 12 of the Contract Disputes Act of 1978 (41 U.S.C. 611), and published in the Federal Register semiannually on or about January 1 and July 1.

Question: What amount of funds are expected to be borrowed from Treasury and from the CCC in 1989? Are funds being borrowed in 1988?

Answer: The Corporation does not plan to borrow any additional funds from Treasury in 1989; however, we have included $100 million from CCC. These funds are requested as a hedge against heavy unavoidable losses and will not be used unless necessary. The Corporation has authority to borrow up to $200 million from CCC in fiscal year 1988; however, we do not anticipate using these funds.

FEDERAL CROP INSURANCE FUND

Question: The 1989 Budget proposal shows an increase in undistributed funds to the Federal Crop Insurance Fund from premiums paid by farmers of approximately $175,123,000. Do you expect that expansion of the program will result in this large of an infusion of funds into the Fund?

Answer: No. The $175,123,000 represents the difference between fiscal years 1988 and 1989 under "all other" as displayed on the geographic breakdown. The totals of $607,650,000 in 1988 and $666,250,000 in 1989 reflect expenses which include losses for master marketers and reinsured companies, interest, and debt cancellations and write-offs. This amount is offset by the premium subsidy appropriation for that fiscal year to determine the "all other". The figure for "all other" in fiscal year 1988 is distorted due to the catch-up year subsidy appropriation of $228,523,000.

In fiscal year 1986, the FCIC followed requirements of the GAO that the Corporation conform to Financial Accounting Standards Board Transmittal No. 60 (FASB 60). Under FASB 60, the Corporation would no longer defer premium subisdy appropriations until the subsequent year as had been the practice in past years. The Corporation would match revenues and expenses in the period in which they are earned; therefore, fiscal year 1988 represented a catch-up year for premium subsidy appropriation which included all of crop year 1987 ($129,245,000 based on an estimated premium level of $500 million) as well as 75 percent of crop year 1988 ($99,278,000 based on an estimated premium level of $512 million.)

Question: Is it expected that the premiums charged to farmers will be increased in 1989? If so, on what actuarial basis will increases be determined? On average, what amount can farmers expect to see premiums increase? (For the record, please provide a listing of these increases by crop.)

Answer: Premiums charged to farmers are not anticipated to increase due to the freeze on any changes for the 1989 crop year.

If any rate increases are approved, it will be on the basis of experience.

We could possibly be initiating a review of hybrid seed corn: however, it is not known at this time what kind of a rate increase, if any, would result from such a review.

PRIVATIZATION OF CROP INSURANCE

Question: The 1988 Budget provided the explanation of a proposal to phase-out all federal premium subsidy and ultimately to privatize the Federal Crop Insurance program. This proposal is conspicuously absent from the 1989 Budget recommendation. Has the Administration reconsidered this proposal?

Answer: The Administration elected not to submit a budget based on proposed legislation in fiscal year 1989. In the out-year projections for the 1989 Budget, proposed legislation begins in fiscal year 1990.

Question: Why is it not a part of the 1989 Budget?

Answer: It is not a part of the 1989 Budget although the program has achieved major market penetration by the private sector as would be required for proposed legislation. Recent studies of the crop insurance program indicate a need to refine administrative and procedural structures to assure long term integrity. In addition, actuarial weaknesses demonstrated during 1981-1986 have not shown to have been adequately addressed to demonstrate sufficiency even with consolidation of pure loss costs and administrative expenses as would be necessary in a normal insurance environment.

Question: Do you believe the privatization proposal will be revived in future years?

Answer: Although this proposal was withdrawn for fiscal year 1989, it is anticipated that, as we achieve greater administrative and operational consistency, and as actuarial integrity is more predictable, the option of exploring the withdrawal of the FCIC from direct underwriting and a shift to a catastrophic, premium sustained safety net can be further pursued.

Question: What are your major objectives for the crop insurance program in 1989?

Answer: The Corporation's major objective is to improve and strengthen the administrative and management functions within the FCIC. I am working with Congressional and Departmental review and audit agencies, with FCIC operational management staff, and with our delivery partners to set up procedures and controls to assure that integrity in program delivery and oversight receives the highest priority. In addition, we are reviewing the internal operational controls in FCIC to determine our vulnerabilities and to increase our awareness of the need to address those areas. We have imposed a moratorium on all but the most necessary and previously announced program changes and additions. It is our intention to permit current program requirements to stabilize and to assess future needs prior to resumption of significant alterations in crop program factors.

EFFICIENCY OF DUAL DELIVERY SYSTEM

Question: Since 1982 with the change in the mix of business and the increased volume of policies delivered through reinsured companies, it appears that the level of FCIC field operations personnel has tapered down significantly. Has FCIC incurred substantial savings in personnel costs as a result of the increased activities of reinsured companies?

Answer: No. FCIC has not incurred substantial savings as a result of the increased activities of the reinsured companies. The total personnel compensation has decreased from $34.2 million in 1982 to $30.5 million in 1987. These figures have not been adjusted for inflation prices.

Question: For the record, please provide the level of staff reductions and corresponding savings in expenses for each year since 1982.

Answer: The following table reflects changes in staffing level and dollars by fiscal year:

	CHANGE OVER PRIOR FISCAL YEAR	
FISCAL YEAR	STAFF-YEARS	DOLLARS
1982	+119	+4,525
1983	-209	-1,355
1984	-100	+807
1985	-128	-130
1986	-101	-1,536
1987	-123	-1,480

Question: Have staff reductions occurred primarily in field offices? In what functional areas has FCIC reduced personnel most significantly since 1982?

Answer: During the years from 1982 to the present, FCIC has reduced staff levels to reflect the substantial changes in the functions and resource levels at the individual Field Operations Office (FOO) level of the organization. The most significant change affecting the field organization was the contracting out to private insurance organizations and individual loss adjustment contractors of the marketing and direct loss adjustment activities. These functions were previously managed and operated by FCIC employees. FCIC has reduced the staffing levels in the FOO system from over 1,100 full-time equivalent staff-years to 343 for fiscal year 1988.

Question: The 1989 Budget assumes a reduction of 40 staff years; this follows an estimated reduction of 69 staff years in 1988. To what general policy can these reductions-in-force be attributed?

Answer: The reorganization of and reductions in Field Operations Offices, effective April 30, 1988, was responsible for the majority of the reduced staff years in fiscal year 1988. The staff-year reductions which result from this reorganization will be in effect for the full year beginning in fiscal year 1989, and will result in the organization operating at the lower level of staffing on a permanent basis.

Question: What functional areas will incur these reductions in 1989?

Answer: The reduction of 40 staff-years in 1989 is distributed as follows:

Headquarters	5
Kansas City	6
Field Underwriting Offices	3
Field Service Offices	26
Total Reduction	40

Question: Do you expect that staff reductions will continue to be recommended in the future?

Answer: No. In accordance with projections, staff-years in 1989 will consist of 865 ceiling and 10 non-ceiling staff years for a total of 875, and will remain at that level in the out-years under existing legislation.

Question: How does FCIC plan to address personnel issues in its June report to the Congress?

Answer: Several important personnel initiatives are currently in process which are critical to accomplishment of FCIC objectives. Among these are the completion of the Field Service Office Reorganization, the establishment of additional Compliance Offices in Dallas and Sacramento, and the movement of the Compliance organization to report directly to the Manager. FCIC will report on the progress of these initiatives in its report to the Congress.

Question: It is my understanding that in the case of master marketers, FCIC contracts out the loss adjustment function. In the case of reinsured companies, who performs the loss adjustment function?

Answer: Loss adjustment for reinsured companies is performed largely by their own claims adjusters who have been trained on FCIC approved loss adjustment procedures.

Question: What percentage, on average, are reinsured companies paid for this function? What is the total percentage of premium that reinsured companies receive for all crop insurance activities? How does this compare to fees paid to master marketers?

Answer: The average percentage reimbursement for loss adjustment for reinsured companies for crop years 1981 through 1985 was seven percent of total reinsured company book of business. Beginning with 1986, the companies have been reimbursed with a single rate covering all administrative and loss adjustment costs; therefore, it would be impossible for the Corporation to provide the percentage specifically for loss adjustment for recent years.

The simple average of total compensation to reinsured companies compared to their total book of business for 1981-1987 is 31.6 percent. The simple average of fees paid to master marketers for this same period, excluding any loss adjustment or claims work, is 12.8 percent of their book of business.

Question: How do the loss ratios for reinsured companies and for master marketers compare currently? Do you expect improvement in 1989?

Answer: Crop year 1986 reflected loss ratios of 1.56 for government operations, and 1.52 for reinsured companies. The most recent information we have available is as of March 31, 1988, for the 1987 crop year, which shows loss ratios of 1.10 for government operations and .95 for reinsured companies. Crop year 1987 information is incomplete as final losses have not yet been determined. Crop year 1987 could prove to be our first break-even year since the passage of the FCI Act of 1980, as amended. We can only hope that through our continued efforts toward actuarial soundness, the loss ratio will improve; however, we are reflecting a loss ratio of 1.46 in the 1989 Budget which shows improvement over our projected 1.52 loss ratio for 1988.

PROGRAM ADMINISTRATION

Question: An increase of $218,000 is proposed for Administrative and Operating Expenses associated with program administration. Since this function involves all compliance functions, training and development, quality control, and strategies for increased crop insurance program participation, it might be expected to receive some focus. Of this amount, could you please tell the Committee, what will be provided for compliance activities? What type of activities will be instigated?

Answer: The area of Program Administration includes only activities associated with the performance of compliance functions; therefore, the entire increase of $218,000 is compliance-related. The larger increase in this area occurred between fiscal years 1987 and 1988, which amounted to over $1 million. The nature of the compliance activities will remain the same between 1988 and 1989, but will be on a larger scale.

Question: What amount will be used for strategies to increase crop insurance program participation? What type of campaigns will be launched?

Answer: The amount for strategies to increase program participation is included under the budget activities of Agency Sales and Service Agreements and Loss Adjustment Contracts, as well as Management and Administrative Support, and are not broken out separately.

We will redouble the efforts of our two contract divisions--Reinsurance and Marketing--in providing incentives and direction to the private organizations to increase overall business volumes. This can also include a review of the respective agreements to ensure contract provisions support increased market share as a program goal. We have emphasized the need to increase new business at a recent meeting of both delivery systems and will be working with them to explore the obstacles and opportunities for increasing market penetration and participation levels, and to develop an overall marketing strategy for the program.

Question: With expanded premium volume anticipated, is it likely that training of new employees or retraining of current employees will be a priority? What is the amount in the Budget allocated for such efforts?

Answer: Yes. Training and education is a key to preventing program abuse and to enhance program delivery; therefore, it is a priority of the Corporation.

FCIC is working with representatives of the private sector and trade organizations to develop industry-wide standardized training programs for agents and loss adjusters.

Retraining of current FCIC employees in the field offices is also being emphasized due to the restructuring of these offices to concentrate on the adjustment of claims on paper sold by master marketing agents.

We have included $1.5 million in the 1989 Budget for all training activities.

Question: With the development and maintenance of new quality control procedures, will there be any increase in costs? If so, at what level?

Answer: The development and maintenance of new quality control procedures utilizes the proven integrated systems approach. Our quality control functions will not only be more effective and responsive, but will also result in an actual decrease in costs due to a much more efficient system.

PROGRAM MANAGEMENT AND ADMINISTRATIVE SUPPORT

Question: What types of services and goods are associated with the non-discretionary costs under program management and administrative support?

Answer: The nature of the goods and services under Program Management and Administrative Support are all management and administrative functions in the Washington, D.C. and Kansas City, Missouri offices, and include finance, budget, management support, and personnel operations for the Corporation. The non-discretionary increase does not change the types of goods and services under this activity; it provides for an increase for a Federal non-defense non-pay purchases deflator as provided by OMB.

Question: Four staff years will be reduced from the program management and administrative support function. What positions do these staff hold and at what grade and step?

Answer: The reduction of four staff-years under the Program Management and Administrative Support function do not relate to any particular positions; it is reflective of an estimate of either attrition or lapse time in existing unfilled positions.

EXPANSION OF THE CROP INSURANCE PROGRAM

Question: What is the dollar value and the amount of acreage expected to be covered in fiscal year 1989?

Answer: In fiscal year 1989, the number of insured acres is expected to be approximately 61.2 million, which represents approximately $7.6 billion of insurance-in-force and would generate an estimated premium volume of $450 million.

Question: What is the amount expected to be covered by reinsured companies?

Answer: The amount of acres to be insured by reinsured companies in fiscal year 1989 is approximately 50 million, which represents 80 percent of the total business. The amount of insurance in-force for the reinsured companies would be approximately $6.1 billion, with an estimated premium volume of $360 million.

Question: Do you believe that your estimates are optimistic? Are these goals achievable?

Answer: In the past, the Corporation has been overly optimistic with its estimates; however, we have geared down to a more achievable level for 1989. In the 1988 Budget, the Corporation estimated a premium level of $512.4 million for 1988, and our 1989 estimate in the 1989 Budget has been reflected at $450 million which seems to be much more realistic. It is difficult to determine how changes will impact on the premium level.

If the acreage in the set-aside program increases, or our marketing efforts are not achieved, it is possible that even $450 million for crop year 1989 could be slightly high.

ADMINISTRATIVE AND OPERATING EXPENSES FOR AGENCY SALES AND SERVICE AGREEMENTS

Question: The 1989 Budget proposes a net increase of $2,160,000 in Administrative and Operating expenses for master marketer activities. How many additional acres of coverage, and what is the projected increase in premium volume, expected to be handled by master marketers in 1989?

Answer: The total number of acres expected to be insured through the master marketers in 1989 is 12.2 million, which is an increase of seven million acres over 1988 and is expected to generate a premium volume of $90 million.

Question: Why is there a proposed reduction of 25 staff years for field operations in this function? What will be the impact on the delivery of crop insurance in the counties from which personnel will be removed? Have you planned from what counties personnel will be transferred or removed?

Answer: Prior to the Agency Sales and Service Contract, Field Operations was responsible for recruiting, supervising, and training individual agents. Since the contracts were initiated, this function has been performed by the master marketing agencies for a flat percentage reimbursement. The field reorganization and focus is just now being met to recognize this change in responsibilities, which occurred several years ago. Since the delivery of crop insurance is performed by our delivery systems -- reinsured companies and master marketers -- the delivery of crop insurance will not be affected in those counties from which FCIC personnel, who are not responsible for delivery, are relocated.

The relocation of FCIC personnel has been very carefully planned and established. These actions were based on detailed analysis of workload, distance, accessability, and efficiency. Individuals involved in the delivery system, as well as loss adjustment contractors, will remain unchanged.

Question: In computing the increases for necessary expenses associated with anticipated premium volume in 1989, does FCIC continue to assume an 80 - 20 split in the delivery system?

Answer: Yes. The Corporation will continue to assume an 80/20 split until a shift occurs in the market place that reflects differently.

QUESTIONS SUBMITTED BY SENATOR COCHRAN

PARTICIPATION

Question: Mr. Marshall, in recent years the crop insurance program has been characterized as unsuccessful when judged by the lack of large amounts of premium income or increased insured acres. Would you explain to the Committee what factors have affected participation either by premium or acreage in the FCIC program since 1980?

Answer: The Corporation has achieved increased acreage from 45 million net insured acres in 1981 to 50 million net insured acres in 1987. Although this is not a large increase and may not be considered fully successful, the marketing of the crop insurance program has been adversely affected by producers using other USDA programs as alternative risk management tools. ASCS's set-aside programs alone account for millions of acres being taken out of production. Acreage taken out of production by ASCS set-aside programs for 1986 amounted to 45 million acres and 69 million acres for 1987.

Despite these increases in acreage, the impact on the premium income has been very slight. Our final premium for crop year 1986 of $379.9 million was only slightly higher than the premium level for crop year 1981 of $379.2 million. With increased acreage and premium remaining about the same, the end result was less premium per net insured acre.

The lower premium per acre is a result of the determination made by the Actuarial Division that the premium rates charged at the 65 percent coverage level were too high and the premium rates charged for the 75 percent level were too low. When these adjustments were made, the insured began shifting from the 75 percent coverage level to the 65 percent which impacted on the total premium received by the Corporation. This shift in coverage levels was coupled with the price elections. One price election must be within 90 percent of the estimated market price, and since the commodity prices have dropped, the price elections have paralelled and also dropped. These two factors, coverage levels and price elections, are the major reasons for the lack of increase in the premium levels of the Corporation.

LATE PAYMENTS OF AGENTS

Question: We continue to hear rumors that some agents, as well as farmers, are not being paid on a timely basis. With the exception of those cases that may be in dispute in the legal courts, what can you do to insure that this does not happen in future? More importantly, if the agency and sales agency contractors and company contractors do not pay their agents, will we continue to do business with them in the future?

Answer: The Corporation is not aware of any situations where a reinsured company failed to pay its agent in accordance with the contract between company and agent.

In 1987, the Corporation heard an appeal between two agency sales and service contractors which involved commissions paid to contractors of record by FCIC. The Corporation is aware, as a result of the consideration of additional legal issues and the interpretation of the contacts between the master marketers involved and their agents, that a number of agents have apparently not been paid.

It is the intent of the Corporation to strengthen language in the 1989 Agency Sales and Service Contract to assure contractors have made payment of commissions as specified in their agents' subcontract. To accomplish this, the Corporation will clarify its authority under the Federal Acquisition Regulations to review the agency contract language and settle compliance issues should they arise.

FIELD OFFICE REORGANIZATION

Question: You recently reorganized the FCIC field force. Would you tell us how this reorganization will affect the marketing and loss adjustment functions of the Corporation?

Answer: The reorganization of the field should not affect the marketing of crop insurance as the marketing function is being performed by master marketers and reinsured companies who have nearly 20,000 agents selling crop insurance. This plan was designed to provide more efficient claims handling and improved service to the policyholder. This new structure no longer requires the field offices to provide marketing and public relations efforts; therefore, the concentration of our resources will be in the adjustment of claims sold by master marketing agents.

FEDERAL ACQUISITION REGULATIONS

Question: The Federal Acquisition Regulations apply government-wide to those commitments that obligate the government to expenditures of appropriated funds. Are the master marketing and company contracts subject to these regulations? If not, why not?

Answer: The master marketing contracts falls under the guidelines of the Federal Acquisition Regulations; however, the Standard Reinsurance Agreement does not. According to counsel, the Standard Reinsurance Agreement does not involve the typical buyer/seller relationship that the Federal Acquisition Regulations appear to address. A copy of this decision is furnished for the record.

[The information follows:]

APR 12 1988

TO: John Marshall
Manager
Federal Crop Insurance Corporation

FROM: Arnold J. Grundeman
Deputy Assistant General Counsel
Foreign Agriculture and Commodity
Stabilization Division

SUBJECT: Applicability of the Federal Acquisition Regulations
to the FCIC Standard Reinsurance Agreement

This is in response to your request for a legal opinion as to whether the provisions of the Federal Acquisition Regulations ("FAR") apply to the standard reinsurance agreement ("SRA") used by the Federal Crop Insurance Corporation ("FCIC").

The FAR at 48 C.F.R. §2.1 defines a contract as "a mutually binding legal relationship obligating the seller to furnish the supplies or services . . . and the buyer to pay for them." The FAR also specifically defines which contracts must be in compliance with the FAR. These definitions are rather specific. They range from fixed-price (48 C.F.R. §16.2), cost-reimbursement (48 C.F.R. §16.3), incentive (48 C.F.R. §16.4), indefinite-delivery (48 C.F.R. §16.5), letter contracts (48 C.F.R. §16.6), small purchase contracts (48 C.F.R. §13.1), and certain other agreements (48 C.F.R. 16.7). In general, the FAR require contracts for the procurement of supplies or services to be obtained on a competitive bid basis.

The FCIC is authorized by the Federal Crop Insurance Act (7 U.S.C. 1501 et seq) (the "Act") to insure producers of agricultural commodities against losses due to unavoidable causes. In carrying this out, the FCIC is directed to provide reinsurance to insurers, to the maximum extent practicable, and to pay operating and administrative costs to insurers of policies on which the FCIC provides reinsurance to the same extent that such costs are covered by FCIC on FCIC policies of insurances. These costs are computed by FCIC in accordance with the statutory provisions and included in the SRA as a fiscal percentage of premium written. The FCIC regulations implementing these provisions with respect to reinsurance are set forth at 7 C.F.R. Part 400.

Section 400.75 of the regulations provides that FCIC will offer SRAs to eligible companies under which FCIC will reinsure policies which the companies issue to producers of agricultural commodities. Any insurer meeting the criteria set forth at 7 C.F.R. 400.76 is eligible to enter into a SRA. FCIC will reinsure policies written on terms, including premium rates, approved by FCIC, on crops and in areas approved by FCIC in accordance with the provisions of the Act, the FCIC regulations and the SRA. (7 C.F.R. §400.77(a)). The SRA requires that each company follow all FCIC procedures in the administration of the crop insurance policies reinsured. (7 C.F.R. §400.79(a)).

At the time a SRA is entered into by an insurance company there is no legal obligation on the part of the insurance company to do anything for FCIC. The insurance company entering into a SRA with FCIC is not required to write any policy or perform any service for FCIC. There is only an offer on the part of FCIC to reinsure the insurance company for policies which the company issues in accordance with the SRA. The SRA, therefore, does not fall within the purview of the FAR definitions of a contract. Accordingly, the provisions of the FAR are not applicable to the SRA.

The Solicitor of Labor has described the function of the crop insurance program as a type of subsidy or financial agreements assistance program. The SRA, he concluded, is "an integral part of the statutory benefit scheme of the program....and may be properly characterized as 'financial assistance.'" See, letter addressed to James Barnes, General Counsel, USDA, August 10, 1981. The SRA does not involve the typical buyer-seller relationship that the FAR appears to address.

CONTRACT CHANGES

Question: Both the agency sales and service agreement and reinsured company contracts have changed almost yearly since 1980. Can the Committee expect major changes in either of these contracts for 1989 and if so, will changes be made in either contract to the detriment of the other? Are changes in these two contracts expected after 1989?

Answer: The 1988 reinsurance agreement for crop year 1989 will be by amendment to the present agreement which began July 1, 1987, for crop year 1988.

The major change requires the reinsured companies to assume additional exposure on the risks they insure. The present agreement permits the company to retain only five percent of the risk on poorly rated coverage ceded to FCIC. This coverage ceded to FCIC is limited to 12 1/2 percent of total company book of business.

For 1989, this agreement is amended to require the company to retain 12 1/2 percent of risks ceded to FCIC, with the ceded coverage limited to 15 percent of the total company book of business.

For 1989, the reinsured company will be required to retain, bottom line, a minimum of 50 percent of the total company book of business. This is an increase from 1988 when the minimum was 43 percent retention.

Turning to agency sales and service contracts, the major changes will be the elimination of the $500,000 minimum business requirement. The electronic processing requirements are now incorporated into the new contract; in 1988, this was by amendment.

The balance of the changes for both the agreement and contract will be cosmetic refinements to the contract language and will not be detrimental to either delivery system.

There are no current plans for changes in either contract beyond 1989.

Questions Submitted by Senator McClure

CROP INSURANCE REQUIREMENTS FOR BORROWING

Question: It appears that crop insurance is increasingly becoming a requirement or condition placed on farmers for participation in government programs, for example--no disaster loans for FmHA without crop insurance. In last year's record you stated that "There is no specific data on the degree to which banks and other financial institutions are requiring crop insurance as collateral on loans." I continue to get information from constituents that this practice is becoming more prevalent. Do you have any studies or information on the extent of this practice at this time?

Answer: We do not have any studies or information available to us at this time as to the extent which banks and other financial institutions are requiring crop insurance as collateral for loans.

Question: Do federal lenders require or "encourage" crop insurance for loan approval, such as FmHA for operating loans? If not, are you aware of any plans to do so?

Answer: Federal lenders do not require crop insurance for loan approval; however, they may make the producer aware of crop insurance as a good risk management tool for his farming operation. We are not aware of any plans to require crop insurance as loan collateral in the future.

ONIONS INSURANCE

Question: I understand that onions are or were scheduled to be implemented as a new crop for crop year 1988. I have received considerable interest in onion insurance from Idaho farmers. Is this program available as yet? If not, why?

Answer: The onion program has not been released at this time. It is currently in the Office of General Counsel for clearance and will be available for 1988 once the final rule has been issued. Onion insurance will be offered to Idaho farmers for 1988 crops when approved and available.

Question: Is there adequate funding in this proposed budget to provide an onion insurance program in FY 1989? If not, what would it cost?

Answer: There should be adequate funding for the onion program. The funding needs for the onion program will be the same as any other new crop program with a possible slight increase in normal operating expenses for start-up costs.

POTATOES INSURANCE ENDORSEMENTS

Question: I believe changes were planned in the potato endorsements and options for crop year 1988. Due to lack of time for rule changing, these changes are now planned for 1989. Would you provide a summary of these changes?

(The information follows:)

NORTHERN POTATO ENDORSEMENT
SUMMARY OF CHANGES

Projected Dates

Earliest Cancellation Date	Effective Crop Year	Filing Date(s)	Policy to Print	Policies and Conversion Agents	Letters to Insureds
04/15/89	1989	12/31/88	Unknown	Unknown	Unknown

Proposed changes in contract provisions contained in the potato endorsement.

1. End of insurance period changed in certain Minnesota counties and all of North Dakota to October 10. The October 31 end of insurance period date was changed to October 25. These date changes were made at the recommendation of various potato grower associations and Mr. Ed Hews - Section 4.b.

2. The Northern Potato Endorsement applies to the following states: Alaska, Colorado, Connecticut, Idaho, Iowa, Maine, Massachusetts, Michigan, Minnesota, Montana, Nebraska, New Hampshire, New York, North Dakota, Oregon, Pennsylvania, Rhode Island, South Dakota, Utah, Vermont, Washington, Wisconsin, and Wyoming.

3. Unit Division guidelines have been changed for all states under the Northern Potato Endorsement to allow for: (a) units by potato type with no additional premium surcharge; or (b) all acreage in the county under a Farm Serial Number as the insurance unit with a 10 percent surcharge for unit division.

4. The freeze chart was removed from the policy/loss adjustment procedure and made a separate option.

Additional minor editorial changes have been made to improve compatibility with the new general crop insurance policy. These changes do not affect meaning or intent of the provisions.

PROCESSED POTATO QUALITY OPTION SUMMARY

This processor option is an attempt to properly insure one market while leaving the current quality option intact for fresh market potatoes.

This option may work for both chippers and french fryers.

Item 3 - This insures that the grower has a processor contract in force. This does eliminate the grower who wishes to play the open market, although he may still have the basic policy and freeze option.

Item 5 - The claim for indemnity (total production) of the endorsement would be superseded by this section.

Item 5b.3- There would be a 25 percent add-back because it is doubtful that a grower would store rejected potatoes unless he is confident of either reconditioning the potatoes for the processor, or finding an alternative market.

SOUTHERN POTATO ENDORSEMENT
SUMMARY OF CHANGES

Projected Dates

Earliest Cancellation Date	Effective Crop Year	Filing Date(s)	Policy to Print	Policies and Conversion Agents	Letters to Insureds
11/30/88	1989	09/30/88	Unknown	Unknown	Unknown

Proposed changes in contract provisions contained in the potato endorsement.

1. The Southern Potato Endorsement is completely revised for the 1989 and subsequent crop years. It is very similar to the marketable potato policy that worked well in the southern states prior to 1989. The intent of this policy is to better serve those areas where there is little storage and potatoes are sorted primarily in the field for direct marketing.

2. The Southern Potato Endorsement applies to the following states: Alabama, Arizona, Arkansas, California, Delaware, Florida, Georgia, Illinois, Indiana, Kansas, Louisiana, Maryland, Mississippi, Missouri, Kentucky, Nevada, New Jersey, New Mexico, North Carolina, Ohio, Oklahoma, South Carolina, Tennessee, Texas, Virginia, and West Virginia.

3. End of Insurance Period and Cancellation/Termination dates have been revised in certain areas as suggested by the Field Underwriting Office's involved.

4. Unit Division guidelines for all states will allow for units by potato type. There will no longer be units by Farm Serial Number or section in these states - section 5.b.

The unit guidelines were amended in these states because it is both management's and various grower association's belief that it is easier to track potatoes by type than by farm.

5. The Quality Option will not be available with the Southern Endorsement. The features of this option are incorporated into the Endorsement.

Additional minor editorial changes have been made to improve compatibility with the new general crop insurance policy. These changes do not affect meaning or intent of the provisions.

FROST/FREEZE OPTION
SUMMARY OF CHANGES

Projected Dates

Earliest Cancellation Date	Effective Crop Year	Filing Date(s)	Option to Print	Policies and Conversion Agents	Letters to Insureds
04/15/89	1989	12/31/88	Unknown	Unknown	Unknown

1. The frost/freeze option is new for 1988. It is a modification of the frost/freeze chart that was contained in, but now removed from, the 1986 policy/loss adjustment procedure. This option can be added to a grower's basic policy for an additional premium. This option applies to both the new Northern Endorsement and the current potato policy effective with the 04/15/88 cancellation date states.

Question: Why are these changes planned?

Answer: The changes included in the new potato endorsements are to help the farmers stabilize their farming program and give risk management options by providing selected coverage by type and unit.

Question: What will it cost to maintain the program at the same service level as it has been in 1987 and 1988?

Answer: The cost of maintaining the program should remain approximately the same, or in direct proportion, for the 1989 crop year as it has for the 1987 and 1988 crop years. There could be a proportional increase or decrease in expenses if there is a large increase or drop in insurance participation or unexpected losses.

FCIC PROGRAM AND IRRIGATION WATER PROBLEMS

Question: I understand that FCIC has shown a concern about the continuing drought conditions and a willingness to negotiate settlements with tree and vine crop producers such that efforts can be made to save the trees and vines from excessive water stress. Would you briefly outline this plan?

Answer: FCIC will give consent if recommended by University Extension personnel, to abort apple and grape crops in situations where the loss of water due to drought result in reduced allocations by the irrigation district sufficient to cause tree death if the crop would be carried forward to harvest.

Partial or total abortion could be granted on an insurance unit where supplies of water are reduced from that received in 1987; however, this will be dealt with on a case-by-case basis with recommendations by University Extension personnel.

Where available water is diverted from one insured unit to another insured unit, excess production over the guarantee from the unit receiving the water will be applied to the unit from which the water was diverted.

Question: I also understand that irrigated fall planted crops and early spring crops under insurance will be fully covered since all parties were unaware of this year's water shortage until planting was complete. The farmers appreciate this, but it seems that the extensive nature of the drought might cause stress on FCIC's budget. Do you have an estimate of the additional costs to FCIC this will cause in F.Y. 88? Is there adequate funding to cover FCIC program costs, including administration and operations, under these circumstances? If not, how do you propose to resolve the short fall?

Answer: Based on a complete loss of crops in those areas hardest hit by the reservoir water storage shortfall, the Corporation could pay out up to $35,000,000 in the Pacific Northwest. Based on estimated total premium of approximately $12,000,000 for 1988, in the four Northwest States of Idaho, Oregon, Utah and Washington, losses could result in a 300 percent loss ratio.

Funding for fiscal year 1988 should be sufficient to cover these losses if the overall loss ratio does not exceed 1.52 as projected for crop year 1988 in the 1989 Budget. In the event that losses would be extremely high throughout the country, the Corporation would be in a position to draw on CCC funds in fiscal year 1988 which was not anticipated in the 1989 Budget, although authority exists for the Corporation to use up to $200 million of CCC funds in fiscal year 1988.

Question: Where a water shortage of known magnitude occurs before planting, such as an irrigation district providing written notice of reduced water, I understand the operating rules will change. Can you explain the proposed program under the conditions outlined above?

Answer: Most crop policies providing irrigation as a practice are based on the assumption that adequate water is available at planting to carry the crop to a normal harvest. This policy requirement makes it the producer's responsibility to identify, on his yearly acreage report, that acreage meeting this policy requirement. Insurance on excess acreage where water is not available could be provided as non-irrigation coverage if available in the county. Based on this, indemnities on the acreage planted that does not have an adequate water supply under the drought conditions that presently exist, could not be indemnified under our irrigated practice guarantee.

Question: Given that some, maybe most, water districts have just recently given notice and that planting dates are near or just past. Do the insurance companies and the farmers understand what this program expects and their obligations under this program?

Answer: General rules for handling drought situations, such as is occurring this year, are provided during training sessions for agents by FCIC and companies. Farmers should be aware of policy requirements for the irrigated practice at the time the policy is sold and when he reports his insurable acreage each year.

QUESTIONS SUBMITTED BY SENATOR GRASSLEY

Question: This past year, vegetable growers in my state suffered heavy losses due to unusually dry weather. These people had sought Federal Crop Insurance early last spring, but were told multi-peril insurance for alternative crops did not exist in Iowa because no actuarial history existed. Can anything be done for these farmers? What are the options available to them under current Federal Crop Insurance policies?

Answer: FCIC insures certain fresh market and processing vegetables in several areas of the United States. Insurance is mostly offered where fresh markets are developed and published price information is available from third party sources. In the case of vegetables for processing, often grower contracts with a processor are required. In any case, to establish actuarially sound insurance rates, reliable information on production, yields, farming practices, and prices are a necessity. We place a priority on requests for insurance programs based on acreage significance and financial impact on the multi-county region of the state. This information is also gathered from state offices.

Alternative crops recently planted in an area often do not meet actuarial requirements and little can be done through an insurance program for the growers. A stable marketplace must be available before insurance is offered in order to avoid moral and morale hazards.

FCIC considers pilot programs on certain crops to develop information that could be useful for the potential expansion of the crop to other areas of the county. The FCIC Board of Directors has assigned priorities on new crop programs through 1992. One option available to the growers would be to gather information needed for insurance considerations including data from the Extension Service and affected ASCS offices. This information could provide FCIC with data to evaluate the impact of the requested vegetable programs in the state.

FARM CREDIT SYSTEM ASSISTANCE BOARD

QUESTIONS SUBMITTED BY SENATOR BURDICK

DEBT OBLIGATIONS

Question. Is it possible and/or probable that you will issue no debt obligations in fiscal year 1988?

Answer. We expect the Financial Assistance Corporation to issue debt obligations in fiscal year 1988.

INTEREST ON DEBT OBLIGATIONS

Question. While I recognize that both the Office of Management and Budget and the Congressional Budget Office have done their own estimations of the interest required in Fiscal Year 1989 under the Agricultural Credit Act of 1987, I am curious to know what your estimate would be if you were asked to provide one. What would that estimate be and how would you arrive at it?

Answer. As discussed in my testimony, interest rates are the unknown variables that prevent an accurate prediction of future interest payments by the Federal government. I believe OMB used a reliable model in estimating interest for FY 1989. I support their recommendation that $175 million be earmarked for FY 1989 interest on FAC debt obligations.

INTEREST APPROPRIATION

Question. If obligations were issued and interest was incurred, what would be the result if no money were appropriated to pay for that interest? Or, on the other hand, if the money appropriated were insufficient to cover the interest payments? Would the interest payments be made, and who would cover the cost?

Answer. There is no provision under the Agricultural Credit Act of 1987 for Fiscal Year 1989 interest payment on Financial Assistance Corporation debt obligations by any entity other than the Federal Government, through appropriated funds. Failure to appropriate funds for this purpose does not relieve the U.S. Government from its obligations to make these interest payments.

FUNDING FOR THE ASSISTANCE BOARD

Question. How is the Farm Credit System Assistance Board funded?

Answer. The Assistance Board will be funded through proceeds from the debt obligations issued by the Farm Credit System Financial Assistance Corporation. Until the FAC operations are underway, the Board is using funds for operating expenses from the revolving fund, established under the Farm Credit Act of 1971.

Question. What are the sources of its resources? Will they have to be paid back at some time?

Answer. The Assistance Board will repay the Revolving Fund from debt obligations issued by the FAC within FY 1988. Remember, too, that System institutions are responsible for repaying the principal and a portion of the interest costs associated with debt obligations issued by the FAC.

ASSISTANCE BOARD INVOLVEMENT WITH FCA

Question. How are you interacting with the Farm Credit Administration?

Answer. While Assistance Board activities and operations are completely separate from the Farm Credit Administration, we keep in close touch with the FCA on matters of mutual concern and shared responsibility.

QUESTIONS SUBMITTED BY SENATOR COCHRAN

TYPES OF ASSISTANCE

Question. The 1987 Farm Credit Act calls for both cash and non-cash assistance for the FCS. In your opinion, Mr. Thor, which kind of assistance will be provided? Why?

Answer. I believe the Assistance Board will provide both cash and non-cash assistance. It is evident as the Board works with financially troubled FCS institutions that their financial problems stem from more than poor macro-economic conditions. Management and policy areas need to be examined to avoid making the same mistakes in the next decade that were made in the past. Solutions must involve more than writing a check.

IS INTEREST APPROPRIATION MANDATORY?

Question. There has been considerable discussion between OMB, CBO, and the Budget Committee about the scoring of interest costs on bonds issued by the Financial Assistance Corporation. Why do you contend that an appropriation in Fiscal Year 1989 to pay interest costs on bonds should be mandatory?

Answer. Under the Agricultural Credit Act of 1987, the U.S. Treasury must pay full interest on 15-year debt obligations issued by the Financial Assistance Corporation for the first five years, one-half for the next five years, and none for the remaining time. The law states that the interest paid by the U.S. Treasury shall be paid from appropriated funds, and provides no alternative provision for payment.

QUESTIONS SUBMITTED BY SENATOR GRASSLEY

CHOOSING THIRD ASSISTANCE BOARD MEMBER

The Act clearly specifies that the Assistance Board is to be composed of three members. The third member is to be "an agricultural producer, experienced in financial matters, and appointed by the President..." The input of this third member is essential to the activities of the Board. When Secretary Lyng testified before this Committee on February 22, seven weeks ago, I asked him about the appointment of the producer member to the Assistance Board. To my knowledge, the appointment of that member still has not been made, seven weeks later!

Question. Has the Assistance Board made any accommodation for the absence of the farm member of the Board?

Answer. The Assistance Board has successfully conducted business as directed by the Act under the leadership of Secretaries Lyng and Baker, who constitute a quorum of the three-member Board. We have accomplished several goals within the time set by the Act. We look forward to having a full, three-member Board, but we are functioning well under our present two-member quorum.

Question. When will this appointment finally be made?

Answer. As an employee of the Board, I am not involved in the selection process. However, I understand that the Administration is reviewing a short list of candidates and that a selection will be made in the future.

Question. What is the justification for the delay?

Answer. Again, I cannot speak for those responsible for selecting the third Board member.

ESTABLISHING SPECIAL ASSETS COUNCIL

Question. Mr. Thor, the Assistance Board is supposed to establish the National Special Assets Council to monitor compliance with the debt restructuring requirements. What is the progress of establishing this Board?

Answer. We are considering a number of matters in connection with the formation of the Special Assets Council, including its specific mission and responsibilities, its interaction with and relationship to local Councils and the number of members needed to be most effective. These questions must be resolved before the Special Assets Council can be established.

Question. What do you intend to be the composition of this Board?

Answer. As stated above, we are now considering the most effective size and composition of the Special Assets Council. We hope to make our recommendations to the Board in the near future.

PREDATORY PRICING

Mr. Thor, the Assistance Board has special powers in relation to those Districts which receive assistance. These powers include approval of credit standards and interest charged on loans. I have already received dozens of complaints from Iowa bankers that the Omaha District of the Farm Credit System is "undercutting" them on interest rates; that the interest rates charged do not reflect the costs on the debt instruments.

Question. Will the Assistance Board evaluate all credit policies of institutions receiving assistance?

Answer. Yes, the Assistance Board will examine all the credit policies of all System institutions requesting assistance and require that appropriate changes be made.

Question. Will it require the institutions to modify their credit terms of existing loans, if discovered to be inappropriate?

Answer. Yes, to the extent that changes can be made under the terms of the loan contract. The Assistance Board has written to each applicant institution, emphasizing our concern about reports of "predatory pricing" and reminding each that this practice is not condoned by the Board or by the Farm Credit Administration.

FARM CREDIT SYSTEM LOSSES

Mr. Thor, about a year ago, the Farm Credit Administration came to Congress asking for financial assistance. The message was that the financial status of the System was rapidly deteriorating, thereby impairing borrower stock and investor confidence. However, losses have been reduced from $2.7 billion in 1985 and $1.9 billion in 1986 to just $17 million in 1987.

Question. Do you anticipate the System will require all of the bonding authority allowed in the Agricultural Credit Act?

Answer. We do not anticipate that the Assistance Board will use its entire $4 billion authority. We will continue to be cautious in assessing the System's combined financial condition until we see improvement in the System's enormous operating losses. The Board will be very careful in certifying financial assistance, choosing the most efficient way to allocate necessary funds. Thus, at this time we believe that the system will not require all of the bonding authority allowed under the law.

SUBCOMMITTEE RECESS

Senator Burdick. This ends today's hearing. The subcommittee would very much like to thank each of you for being here. Our next hearing will be held on Tuesday, April 19 in this same room beginning at 10 a.m. At that time, we will hear from representatives of the Food and Nutrition Service and the Human Nutrition Information Service. Until then, the subcommittee will stand in recess.

[Whereupon, at 11:52 a.m., Wednesday, April 13, the subcommittee was recessed, to reconvene at 10 a.m., April 19.]

AGRICULTURE, RURAL DEVELOPMENT, AND RELATED AGENCIES APPROPRIATIONS FOR FISCAL YEAR 1989

TUESDAY, APRIL 19, 1988

U.S. SENATE,
SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS,
Washington, DC.

The subcommittee met at 10:09 a.m. in room SD–138, Dirksen Senate Office Building, Hon. Quentin N. Burdick (chairman) presiding.

Present: Senators Burdick, Bumpers, Kasten, and Grassley.

DEPARTMENT OF AGRICULTURE

STATEMENT OF JOHN W. BODE, ASSISTANT SECRETARY FOR FOOD AND CONSUMER SERVICES

ACCOMPANIED BY DENNIS KAPLAN, OFFICE OF BUDGET AND PROGRAM ANALYSIS, DEPARTMENT OF AGRICULTURE

INTRODUCTION OF WITNESSES

Senator BURDICK. Good morning, ladies and gentlemen. This morning the Subcommittee on Agriculture, Rural Development, and Related Agencies will hear testimony from the Food and Nutrition Service and the Human Nutrition Information Service on the proposed budget for fiscal year 1989.

Our witnesses this morning include Mr. John Bode, Assistant Secretary for Food and Consumer Services; Ms. Anna Kondratas, Administrator for the Food and Nutrition Service; Dr. Laura Sims, Administrator for the Human Nutrition Information Service; and Mr. Dennis Kaplan of the Office of Budget and Program Analysis at USDA.

FNS and HNIS have the distinct and vital tasks of supporting what I often refer to as the "consumer side of agriculture." Each day, FNS administers the distribution of millions of dollars of nutrition assistance in the form of commodities, meals, and vouchers to children in schools and child-care programs, to seniors through meals-on-wheels and at institutional settings, to American Indians on reservations, to pregnant women and infants on the WIC program, and to needy families through the TEFAP program. In addition, FNS administers the largest and most important single defense we have against hunger, the Food Stamp Program.

HNIS is the agency at USDA charged with keeping all Americans on track by issuing dietary guidelines to keep us healthy and fit.

With a combined budget of over $20 billion, FNS and HNIS should have a great deal to tell us about their accomplishments in 1988 and their plans for fiscal year 1989.

Welcome to you all.

And our first witness will be Mr. Bode.

Before we hear from the witnesses, I have a statement from Senator Sasser and it will be made a part of the record.

[The statement follows:]

STATEMENT OF SENATOR JIM SASSER

Thank you, Mr. Chairman. I would like to add my welcome to our panel from the Department of Agriculture.

Like many in the Senate, I am concerned about our commitment to our supplemental food programs. We have seen that many efforts, such as the Women, Infants, and Children Supplemental Food Program, are proving successful not only socially, but also economically. I'm sure you are aware of studies from the Harvard University School of Public Health which note that for every $1 spent on prenatal care, the federal government can save $3 in infant and child care. As well, the health department in the state of Missouri reports that 49 cents is saved in Medicaid costs during the first 45 days of an infant's life for every $1 spent on prenatal care. And finally, last year's national evaluation of the program showed a 20- to 33-percent decline in late fetal deaths among WIC recipients.

These are figures that many of us have heard. But the fact is they support what has become one of the more successful investments of the federal government—an investment in our childrens' health.

While we see an increase in funding for the WIC program this year, we will still serve only about one-half of those eligible to receive assistance. This means that children are being taken off the program prematurely, and that some expectant mothers are being turned away. These actions disturb me greatly.

I believe that we need a stronger commitment to the WIC program and other supplemental feeding programs within the Department of Agriculture. I feel that these programs are the type of investments from which we are able to see sound and healthy returns.

Thank you.

STATEMENT OF JOHN BODE

Mr. BODE. Thank you, Mr. Chairman. With your permission, I will summarize my statement.

Senator BURDICK. I might say to all the witnesses this morning your complete statement will be made a part of the record, so you are at liberty to summarize.

Mr. BODE. Thank you, sir.

I will summarize very briefly by pointing out that our mission is to ensure that food assistance is available to all citizens who cannot provide for themselves. The President's budget provides a request, the highest funding request in history, for these programs, and it is consistent with the Bipartisan Budget Agreement. We feel that this strong budget request is consistent with our mission of fighting hunger in this country, and providing food assistance—a strong level of food assistance—to all low-income Americans, as well as providing for the National Nutrition Monitoring System and other important activities of the Human Nutrition Information Service.

With that summary, I will let others testify in greater detail.

PREPARED STATEMENT

Senator BURDICK. Very fine. We have your complete statement and it will be made a part of the record.

[The statement follows:]

STATEMENT OF JOHN BODE

Mr. Chairman, members of the committee, I am pleased to have this opportunity to speak to you today on the 1989 budgets for the Food and Nutrition Service and the Human Nutrition Information Service.

With me today are Anna Kondratas, Administrator of the Food and Nutrition Service, and Dr. Laura Simms, Administrator of the Human Nutrition Information Service.

Mr. Chairman, as you know, our mission is to ensure that food assistance is available to all citizens who cannot provide for themselves. The President's budget recommendation submitted to the Congress several weeks ago is our proposal to support the food assistance programs. It is the highest funding request in history for these programs. The request also adheres to the Bipartisan Budget Agreement, the Budget Summit, if you will, which calls for deficit reductions that exceed the requirements of the Balanced Budget and Emergency Deficit Control Reaffirmation Act of 1987. We plan to live up to our side of this agreement.

Overall, we recommend an increase over 1988 for the permanent programs in the "mandatory spending category" under the Bipartisan Budget Agreement, including Food Stamps, Nutrition Assistance for Puerto Rico, Special Milk and Child Nutrition. In the "discretionary domestic category" we also recommend increases for the Supplemental Feeding Programs and for Cash and Commodities for Selected Groups such as the elderly and Indians.

In addition to the $20.3 billion we are requesting for the food programs, USDA will provide additional support to the food assistance programs with commodities purchased to stabilize market conditions under Section 32 and through CCC-acquired stocks. As you know, commodity availability to the food programs is sensitive to changes in farm production.

Changes in the farm legislation have brought supply and demand for dairy products into better balance and reduced the need for surplus acquisition. This has resulted in some modification to our commodity distribution policy designed to assure that our commitments to domestic food assistance are met in an orderly manner. USDA has allocated dairy products differently among programs in this fiscal year. For Child Nutrition Programs, each state's allocation of cheese and nonfat dry milk has been capped at the school year 1987 levels. Dairy requests by charitable institutions are being limited to those quantities which can be used by needy recipients. We are monitoring requests without a specific cap for the Nutrition Program for the Elderly, Food Distribution Program on Indian Reservations, the Commodity Supplemental Food Program, and summer camps. The National Commodity Processing Program is capped at 35 million pounds of cheese with no cap on nonfat dry milk or butter.

For the Temporary Emergency Food Assistance Program, the Department has determined that 245 million pounds of cheese and 72 million pounds of nonfat dry milk will be available for fiscal year 1988. We are monitoring this situation closely and will provide additional quantities to the Temporary Emergency Food Assistance Program if supplies permit.

Only small amounts of rice and honey remain in CCC inventory. March was the last month for the distribution of rice and honey through the Temporary Emergency Food Assistance Program. Any balances in inventory are needed to fulfill school lunch and charitable institution commitments for the rest of this fiscal year.

These policies reflect USDA's current analysis of the commodity situation. If acquisitions are higher or lower than estimated by USDA, the guidelines will be modified.

Also these policies have been developed for fiscal year 1988 only. The budget being considered for 1989, assumes normal commodity support for the permanent programs at essentially the same levels as experienced for the last several years. Due to the success of our programs to support America's farmers, we expect commodity availability trends experienced in the past few years to continue. A better balance has been achieved between supply and demand, which has reduced large federal inventories, especially in dairy. At this point, it is not possible to accurately forecast inventory levels, acquisitions, or dispositions of dairy stocks for years beyond fiscal year 1988.

Dr. Sims and Ms. Kondratas will provide more details on the budget and our legislative proposals. We will be glad to answer any questions the committee might have.

FOOD AND NUTRITION SERVICE

STATEMENT OF ANNA KONDRATAS, ADMINISTRATOR

ACCOMPANIED BY:

GEORGE A. BRALEY, DEPUTY ADMINISTRATOR, SPECIAL NUTRITION PROGRAMS
SCOTT DUNN, DEPUTY ADMINISTRATOR, FOOD STAMP PROGRAM
WILLIAM G. BOLING, BUDGET OFFICER

FNS BUDGET REQUEST

Senator BURDICK. Anna Kondratas is next.

Ms. KONDRATAS. Mr. Chairman, members of the committee, my name is Anna Kondratas, Administrator of the Food and Nutrition Service. With me today are George Braley, Deputy Administrator for Special Nutrition Programs, and Scott Dunn, the Deputy Administrator for the Food Stamp Program. With me as well is William Boling, the Agency Budget Officer.

Mr. Chairman, the Budget request for the Food and Nutrition Service totals $20.3 billion and, for the most part, is to continue services and benefits to recipients as required by current law.

The 1989 request for the Child Nutrition Programs is $4.6 billion for 1989. This amount, plus $118.6 million available from fiscal year 1988, funds operations under current law for most programs.

In addition, we anticipate continued availability of $350.9 million in section 32 commodity purchases for a total Child Nutrition Program level of about $5.1 billion. Normal rates of expansion are expected for all programs.

In the Special Milk Program, we anticipate a program level of $22.1 million and propose to fund this level with $19.9 million in new appropriations and $2.2 million in funds carried forward from 1988.

There has been program growth of nearly 27 percent so far in 1988 because of program expansion to split-session kindergartens, but this is lower than we had anticipated. Sufficient funds are requested to meet the costs of further growth and inflation.

For 1989, the Special Supplemental Food Program for Women, Infants and Children and the Commodity Supplemental Food Program are proposed to be combined in a single appropriation.

Our goal is to better focus the funds to meet the needs of the highest priority groups. After the 1988 participation by women, infants, and children and elderly is funded, any remaining funds in CSFP would be allocated for additional participation by women, infants, and children in either the WIC or the CSFP program at the states' request.

The request for 1989 includes $1,876.7 million for the WIC Program. This will sustain 1988 program participation through 1989 and includes an allowance of about $74 million for inflationary increases in program costs.

The request also includes $47.1 million in new appropriations for the Commodity Supplemental Food Program. This will maintain peak participation in CSFP achieved in 1988 throughout 1989.

In Food Stamps, this year's budget request of $12.5 billion will fully fund the estimated levels of benefits under current law. We are proposing no legislation which would affect benefits or participation.

We are requesting $116 million for the Employment and Training Program to assist food stamp recipients to find work and leave the program. We are also requesting funds to cover increases for inflation for our share of the states' administrative expenses.

Further, we are seeking $10 million to purchase improved equipment for the processing of food coupons at commercial banks and the Federal Reserve. The current process has been criticized by the General Accounting Office as not being fully reconcilable.

We are also well aware of the concerns of the committee for a revised quality control system which will fully consider the reviews that have been conducted both by the Department, the National Academy of Sciences, and others. We have been developing a report, and hope to have it before Congress in the near future.

For Nutrition Assistance for Puerto Rico, the authorized grant level of $908,250,000 is requested.

The Cash and Commodities for Selected groups appropriation request is $199.1 million.

For Food Program Administration, we are requesting $94.8 million for 1989. Some of the initiatives that this request will cover include the development and implementation of an independent review capability for school food service claims, which we believe needs attention, and a revised accounting system to replace the existing one which has been criticized by the General Accounting Office. Our request also includes the fourth year of our Information Resources Management Plan, including additional computer work stations and critical software development.

It includes a work measurement system designed to accurately report the use of staff resources and, as I mentioned earlier, funds for the implementation of a new Food Stamp Redemption System.

All of these initiatives result not only from concerns that we have as program administrators but from recommendations that we have received from the Office of the Inspector General and the General Accounting Office.

Mr. Chairman, this concludes my statement. We will be happy to answer any questions.

PREPARED STATEMENT

Senator **Burdick**. Thank you. Your complete statement will be made part of the record.

[The statement follows:]

STATEMENT OF ANNA KONDRATAS

My name is Anna Kondratas, Administrator of the Food and Nutrition Service. With me today are George Braley, Deputy Administrator for Special Nutrition Programs and Scott Dunn, Deputy Administrator for the Food Stamp Program. With me as well is William Boling, Agency Budget Officer.

Mr. Chairman, the budget request for the Food and Nutrition Service totals $20.3 billion and, for the most part, is to continue services and benefits to recipients as required by current law. Unlike past budgets, limited legislation is proposed and no legislative changes are assumed in the budget request.

Child Nutrition: The 1989 request for the Child Nutrition Programs is $4.6 billion for 1989. This amount, plus $118.6 million available from Fiscal Year 1988, funds operations under current law for most programs. It does not include funding for the Nutrition Education and Training Program, funded at $5 million in 1988, nor does it continue the funding for special audits under the Child Care Food Program.

In addition to the $4.7 billion available to the Food and Nutrition Service under this request, we anticipate continued availability of $350.9 million in Section 32 commodity purchases for a total program level of about $5.1 billion. We expect to serve about 4.1 billion lunches in 1989 and reimbursement rates to increase about 4.7 percent as required by law. Normal rates of expansion are expected for all programs.

Special Milk: In the Special Milk Program, we anticipate a program level of $22.1 million and propose to fund this level with $19.9 million in new appropriations and $2.2 million in funds carried forward from 1988. There has been program growth of nearly 27 percent so far in 1988 due to program expansion to split-session kindergartens, but this is lower than we had anticipated. Sufficient funds are requested to meet the costs of further growth and inflation.

Supplemental Feeding Programs: For 1989, the Special Supplemental Food Program for Women, Infants, and Children (WIC) and the Commodity Supplemental Food Program (CSFP) are proposed to be combined in a single appropriation.

Our goal is to better focus the funds to meet the needs of the highest priority groups. After the 1988 participation in women, infants, and children and elderly are funded, any remaining funds would be allocated for additional participation by women, infants, and children in either the WIC or CSFP program at the States' request.

The request for 1989 includes $1,876.7 million for the WIC Program. This will sustain 1988 program participation into 1989 and includes an allowance of about $74 million for inflationary increases in program costs. The request also includes $47.1 million in new appropriations for the Commodity Supplemental Food Program. This amount, plus $4.8 million which will be available from 1988 after complying with the provisions of the 1988 Continuing Resolution, will maintain peak participation achieved in 1988 throughout 1989. Based on current program estimates this should leave $3.7 million available for allocation based on State requests for additional caseload for women, infants, and children.

We are also proposing legislation to reduce the earned administrative funding on bonus commodities, which are not a part of the CSFP food package, distributed through these sites from CCC inventories and Section 32 surplus removal operations from 15 percent to 5 percent. We believe that this lower level more nearly represents the local administrative costs of this activity and would release another $1.5 million of the funds available for services to women, infants, and children. This proposal would not change the total amount requested.

Food Stamp: This year's budget request of $12.5 billion will fully fund the estimated levels of benefits under current law. We are proposing no legislation which would affect benefits or participation. This request assumes that the annual average unemployment rate will continue to decline to 5.75 percent and the cost of the Thrifty Food Plan will rise from $290 to $294. We are requesting $116 million for the Employment and Training Program to assist food stamp recipients to find work and leave the program and increases for inflation to cover our share of the States' administrative expenses.

We are also seeking $10 million to purchase improved equipment for the processing of food coupons at commercial banks and the Federal Reserve once they have been redeemed at an eligible grocery store. The current process has been criticized by the General Accounting Office as not being fully reconcilable. By making use of more modern technology, we feel that much of GAO's concern can be addressed. An additional $200,000 is also included in agency administrative funds for contract assistance on system implementation.

In addition, we are well aware of the concerns of the committee for a revised Quality Control System which will fully consider the reviews that have been conducted both by the Department and the National Academy of Sciences and others. We have been developing a report and hope to have it before Congress in the near future.

For Nutrition Assistance for Puerto Rico the authorized grant level of $908,250,000 is requested.

Under the appropriation, Cash and Commodities for Selected Groups, three major activities are funded:

- The Food Distribution Program on Indian Reservations (FDPIR) which will serve about 145,500 participants in 1989.

- The Nutrition Program for the Elderly (NPE) which will serve 249 million meals at the statutory rate of 56.76 cents.

- The residual requirements of the Compact of Free Association including continued program assistance to Palau.

The total request is $199.1 million.

No funds are being requested for administration of the Temporary Emergency Food Assistance Program. This program is not authorized beyond September 30, 1988.

Food Program Administration: A total of $94.8 million is requested for 1989. This is a net increase of $9 million above the 1988 appropriation of $85.8 million.

Key Proposals include:

- The reduction of 85 staff-years below the 1988 level.
- The development and implementation of an independent review capability for school food service claims.
- A revised accounting system to replace the existing system criticized by GAO.
- The fourth year of our Information Resources Management Plan including additional computer work stations and critical software development.
- A work measurement system designed to accurately report the use of staff resources and as I previously mentioned, implementation of a new Food Stamp Redemption System.

All of these initiatives result not only from concerns that we have as program administrators but from recommendations received from the General Accounting Office and the Office of the Inspector General.

BIOGRAPHICAL SKETCHES

ANNA KONDRATAS

Anna Kondratas was named Administrator of the Food and Nutrition Service June 1, 1987. She served as the Acting Administrator prior to this appointment. From September 1986 to March 1987, she was Director of the Office of Analysis and Evaluation. In that capacity, she supervised research and evaluation activities and provided policy analysis on legislative, budgetary, and program management issues for all the Service's operational programs. Before coming to the Agriculture Department, she was a senior policy analyst and the Schultz Fellow in Social Welfare at The Heritage Foundation in Washington, D.C. Prior to that, she directed issues research at the Republican National Committee.

A former Fulbright Scholar in Poland, Ms. Kondratas earned her B.A. magna cum laude at Harvard University, an M.A. at Boston University, and an M.B.A at George Mason University in Fairfax, Virginia.

Ms. Kondratas has published numerous articles on the subject of poverty, welfare, and entitlement reform, and has been a frequent public speaker on these issues. Her book, Out of the Poverty Trap, coauthored by Stuart Butler, was published by Free Press/ Macmillan in October 1987.

She is married, has two teenage children, and is a resident of Springfield, Virginia.

G. SCOTT DUNN

Scott Dunn has been with the Food and Nutrition Service since November 1986. Prior to that he served as Special Assistant to the Assistant Secretary of Agriculture for Food and Consumer Services for over five years.

Before joining the U.S. Department of Agriculture he served as a professional staff member with the U.S. Senate Committee on the Budget as the analyst for income security.

Mr. Dunn, a native of California, has also worked at the State and local levels of government. He holds a Master's degree from the University of Southern California and a Bachelor's degree from Claremont McKenna College.

HUMAN NUTRITION INFORMATION SERVICE

STATEMENT OF DR. LAURA SIMS, ADMINISTRATOR

HNIS BUDGET REQUEST

Senator BURDICK. The next witness is Laura Sims.

Dr. SIMS. Thank you, Mr. Chairman.

I am Dr. Laura Sims, Administrator of the Human Nutrition Information Service. I am pleased to have the opportunity this morning to discuss with you our HNIS program and the fiscal year 1989 budget request.

As you know, HNIS conducts applied research to support the Department's responsibilities in nutrition monitoring and dietary guidance. We collect data on what people are eating and prepare informational materials for both professionals and the public which are based on sound research-based evidence.

We are especially proud of our accomplishments this year. Within the next few months, we will complete the publication of results from both the 1985 and the 1986 Continuing Survey of Food Intakes by Individuals. We are pleased to report that our results are already being used by industry, by federal food program managers, as well as by nutrition educators.

At the time the continuing survey was funded, we promised quick publication of results. We are very proud to report that we have lived up to that promise.

Also this year, HNIS has released two new sections of Agriculture Handbook No. 8. One section provides food composition data on fish and shellfish, and another on legumes and legume products. We have also just released a separate report on the sugar content of foods.

We have improved communication with other agencies, both within and outside of the Department. As part of our responsibility for the National Nutrition Monitoring System and the Dietary Guidelines for Americans—both joint endeavors with DHHS—we have improved comparability between the USDA and DHHS dietary intake surveys. We have submitted to Congress an updated operational plan for nutrition monitoring; and are currently hard at work on a second report to Congress on the nutritional status of Americans.

We have published a set of bulletins for helping the public incorporate the dietary guidelines into their daily practices, and have published a kit for use by home economic teachers in teaching the Dietary Guidelines concepts to their students.

Our fiscal year 1989 budget request is for $9.3 million, up from $8.6 million in 1988. The increase will be used to analyze data from our

1987 Nationwide Food Consumption Survey which is currently in the field, and we will initiate analyses of the upcoming 1989 Continuing Survey.

Some of these analyses will be directed toward updating USDA food plans to 1987 consumption patterns. As you know, the lowest of these food plans, the Thrifty Food Plan, is the basis for the Food Stamp Program allotment.

In addition to funding for data analysis, the proposed level of funding will allow us to continue data collection for the Continuing Survey in 1990, support additional food composition analysis projects, and to continue our momentum in the nutrition education and guidance arena.

It will also support our activities as part of the Steering Committee on the project which is preparing the second report to Congress on the nutritional status of the American people.

Thank you. I will be pleased to take any questions that you may have.

PREPARED STATEMENT

Senator BURDICK. Thank you. We will make your complete statement part of the record.

[The statement follows:]

Statement of Laura S. Sims

I am Dr. Laura Sims, Administrator of the Human Nutrition Information Service (HNIS). I am pleased to be here today to discuss HNIS's budget request for Fiscal Year 1989.

Mission of the Human Nutrition Information Service

The mission of the Agency is threefold: (1) to conduct and interpret applied research on the nutrient content of foods; (2) to monitor the patterns of food consumption by Americans and the nutritional adequacy of their diets; and (3) to provide information needed by the American public to make informed food choices. This research supports the Department's commitment and responsibilities to monitoring the dietary status of the population and to nutrition education. The importance of research in these areas was specifically emphasized by the Congress in the Food and Agriculture Act of 1977, the Agriculture and Food Act of 1981, and the Food Security Act of 1985.

HNIS has a total of about 90 scientists and support staff in two operating units: the Nutrition Monitoring Division and the Nutrition Education Division. The Nutrition Monitoring Division is the national resource for information on the nutritive value of foods and conducts national surveys to obtain information on food consumption by households and individuals. The Nutrition Education Division analyzes diets for implications for nutrition education programs and conducts research to determine how guidance can best be communicated. Within the USDA, HNIS has responsibility for the National Nutrition Monitoring System (NNMS)--a system of activities, primarily in USDA and the Department of Health and Human Services (DHHS), that are essential to providing timely information about the dietary and nutritional status of Americans and factors that affect that status. HNIS also coordinates the development and publication of the Dietary Guidelines for Americans--another joint effort by USDA and DHHS.

Recent accomplishments illustrate our Agency's commitment to its mission.

1. Progress on National Nutrition Monitoring System Activities

(a) An updated joint USDA/DHHS implementation plan, the "Operational Plan for the National Nutrition Monitoring System," was submitted to Congress in September 1987. The plan covers monitoring activities through 1996.

(b) Staffs of USDA and DHHS met on a formal basis to increase comparability between the Nationwide Food Consumption Survey (NFCS) and the National Health and Nutrition Examination Survey (NHANES). In addition, formal meetings were held at the Assistant Secretary level to review progress. Meetings at both levels are continuing. We have taken a number of steps to improve comparability. Among these are:

- Use of a single food-coding system and nutrient data base in both surveys.

- Modification of certain NFCS interview procedures and questions to make them more comparable with NHANES and other Government surveys.

- Reporting results according to similar formats and the same age groupings.

- Survey documentation materials (data tapes, methodology reports) that follow similar formats.

(c) A joint USDA and DHHS steering committee has initiated plans for the second report to Congress on the nutritional status of the population. (The first report was issued in 1986.) The new report will include an update on the dietary and nutritional status of the U.S. population based on survey data released since publication of the first report. It will also include an indepth analysis on nutritional factors affecting cardiovascular disease and iron nutriture. The report is being prepared under contract with the Life Sciences Research Office (LSRO) of the Federation of American Societies for Experimental Biology (FASEB). An ad hoc Expert Panel on Nutrition Monitoring composed of persons outside the Government who represent a variety of disciplines, including agricultural economics, nutrition, behavioral science, epidemiology, public health, and statistics, was selected by LSRO and has begun working.

Through the joint steering committee, USDA has briefed the Expert Panel on USDA monitoring activities and on results from the Continuing Survey of Food Intakes by Individuals. We are providing analytical support also. We expect the final report to be ready in April 1989.

2. Progress on Survey Activities

(a) CSFII. We have completed the first 2 years of data collection in the Continuing Survey of Food Intakes by Individuals. The first results from the 1985 survey were released 6 months after data collection was completed. By this summer, less than 1-1/2 years after the completion of the data collection for 1986, we will have completed the release of all reports and data tapes from both the 1985 and the 1986 surveys.

The CSFII results have already been useful to USDA and others in formulating and justifying policies relating to food production and marketing, food assistance programs, and dietary guidance. For example:

- Survey results that showed a move away from eating meat, especially in high-income households, were noted by meat producers and marketers who have previously assumed that meat consumption rose with income. The results were used as a catalyst to develop and market meat products in a different way.

- Appropriate targeting of the Food Stamp Program was shown: Households receiving food stamps had lower incomes than households eligible for but not receiving food stamps, but fared as well or better nutritionally.

- 1985 data on 4-day dietary intakes of cholesterol and sodium indicate that relatively few individuals meet quantitative goals for these dietary components proposed recently by a professional group. Those individuals who did meet the goals had intakes even lower than the average in certain minerals. Federal policies and nutrition education materials should be designed for the total diet, taking actual intake practices into account.

(b) NFCS. Data collection for NFCS 1987 continues. We expect the first reports to be out by late 1988 or early 1989. Also, we have initiated a study to assess the effect of procedural and data base changes between NFCS 1977-78 and NFCS 1987 on food intakes reported by individuals in the surveys; we call this a "bridging survey."

3. Progress in Nutrient Data Research and Dissemination

(a) National Nutrient Data Bank. The Department has made significant advances in the past decade in nutrient analyses. For the NFCS 1987, reliable nutrient data are available to evaluate the intakes of individuals for calories and 28 nutrients. This compares with only 14 in 1977. Added nutrients and other food components include many considered to be of public health importance--cholesterol, fatty acids, dietary fiber, sodium, potassium, carotene, folacin, zinc, copper, and vitamin E. Not only has the number of nutrients been expanded, but the quality of the food composition data has increased significantly. This is due to improved methods for laboratory analysis as well as improved sampling on a nationwide basis of those foods that contribute significantly to the intakes of specific nutrients.

(b) Agriculture Handbook No. 8, "Composition of Foods...Raw, Processed, Prepared." This year, two additional sections of Handbook No. 8 have been released. These are "Finfish and Shellfish Products" and "Legumes and Legume Products." To date, 16 of 22 sections have been published. The remaining six sections are expected to be completed by 1990, with revisions of already published volumes well under way. This year, we released a separate report on the "Sugar Content of Foods."

4. Progress in Nutrition Education Research

The Department's commitment to promoting optimal human health and well-being through improved nutrition is indicated in its Food and Nutrition Policy statement. This statement was first signed in May of 1985 as a Secretary's Memorandum. It became a Departmental Regulation in January 1987. As indicated by the House Subcommittee on Rural Development, Agriculture, and Related Agencies, HNIS has been designated the lead agency in providing the policy basis for issuing Federal nutritional guidelines to the public. After release of the second edition of "Dietary Guidelines for Americans" in September 1985 by USDA and DHHS, the Secretaries of the two Departments formally adopted the Guidelines as the policy basis for nutrition education efforts. The second edition of the Guidelines was little changed from the first edition which had been used by HNIS since 1980. HNIS coordinated, under the auspices of USDA's Committee on Research and Education, the formation of an interagency Dietary Guidelines Working Group. This group is working effectively to help the nine USDA member agencies speak with one voice in dietary guidance matters. The Executive Secretary of this group is from HNIS. A liaison from DHHS attends USDA's meetings, and HNIS's Administrator attends meetings of a similar group which has been established by DHHS. This is intended to improve communication and to help coordinate dietary guidance activities.

Since the bulletin presenting the second edition of the Dietary Guidelines for Americans was released in September 1985, the Department has printed and distributed well over 2.5 million copies. Many more copies have been printed by other groups from copies for reproduction provided by the Department. The Department is providing the bulletin free through the Consumer Information Center in Pueblo, Colorado. HNIS is working cooperatively with the Agricultural Research Service to fund a study to determine the diffusion of the Dietary Guidelines bulletin and concepts throughout the public and private sector. HNIS featured the Dietary Guidelines in three USDA/FDA Regional Journalists' Conferences and through special exhibits at conferences of professionals in food, nutrition, and health fields.

To help the public put the Dietary Guidelines into practice, HNIS developed and published seven short bulletins--one pertaining to each of the guidelines. These bulletins draw on information from HNIS research on food composition, food consumption behavior, food selection, and food preparation. They incorporate communication concepts found to be most appropriate for national education efforts by Agency research.

To further promote the Dietary Guidelines to the school-age population, a Dietary Guidelines Teaching Kit was developed for use by junior and senior high school home economics teachers in teaching Dietary Guidelines concepts.

Fiscal Year 1989 Budget Request

The HNIS budget request for Fiscal Year 1989 is for approximately $9.3 million, up from our Fiscal Year 1988 appropriation of $8.6 million. All of this increase will be used to analyze NFCS 1987 and to initiate analyses of the CSFII 1989-96. Also, this funding will allow us to continue the CSFII in 1990; to continue our current levels of effort in food composition analysis and nutrition education and guidance; and to support the new Joint Nutrition Monitoring Evaluation Committee.

Analyses of the CSFII 1985 and 1986 indicated that significant changes have taken place in the dietary patterns of women 19-50 years of age and children 1-5. Analysis of NFCS 1987 is essential to determine what changes have occurred in the other sex/age groups. These analyses will allow us to modify and/or redirect our nutrition education activities and will provide important information for the design and implementation of the Department's food and nutrition policies and programs.

The CSFII that will be reinstated next year with FY 1988 appropriations and continued in 1990 with FY 1989 funding has been redesigned to cover all sex/age groups at a lower cost than in the 1985 and 1986 CSFII by using a cost-effective moving average. This approach was recommended by two National Academy of Sciences committees. The new CSFII will consist of two samples--an all-income sample of individuals in 1,500 households and a low-income sample of individuals in 750 households. The survey includes the collection of 3 days of dietary data--an important aspect of all USDA surveys. Research indicates that data on individual intakes for at least 3 days are needed to assess the proportion of the population meeting standards such as the Recommended Dietary Allowances.

The yearly collection and reporting maximizes staff productivity and provides a flexible structure into which topical issues and methodological investigations can be incorporated. The combination of the decennial surveys and the smaller continuous surveys has several advantages. The decennial surveys are needed (1) to provide data for identifying population segments, such as low-income elderly persons, with diets that might predict nutritional risk and (2) for certain indepth analytical studies to determine socioeconomic factors associated with food consumption, expenditure patterns, and nutrient levels. The smaller annual surveys monitor trends in food consumption behavior, which can change quickly in response to shifts in economic status, availability of food supplies due to season and production and marketing practices, consumer perceptions about diet/health relationships, and many other factors.

Ongoing HNIS Activities

Nutrition Monitoring. The Joint Operational Plan for the National Nutrition Monitoring System (NNMS) was submitted to Congress in September 1987 and carries on the monitoring efforts that were outlined in the Joint Implementation Plan submitted to Congress in 1981. This plan describes NNMS activities into the 1990's and includes carefully planned sequential and systematic monitoring efforts that will be implemented by HNIS.

Major monitoring activities in progress include:

- Completion of data collection for NFCS 1987 and initiation of indepth analytical studies. In addition to data on intakes of individuals, the decennial survey includes information on the foods used by households during a 7-day period and the cost of those foods. As it did in 1977-78, food intake and food price data from NFCS 1987 will form the research basis for the new revision of the Thrifty Food Plan--the legal standard for benefits in the Food Stamp Program. Three series of reports are planned for the survey: general, technical, and methodological.

- Work is under way to redesign the 1989 survey to support moving-average reporting as a cost-effective, flexible means of providing trend information in a timely manner. The moving-average approach will be used in CSFII to provide annual estimates of 3 days of dietary intakes for all sex-age groups. Annual 3-day estimates of dietary status for both men and women 20-49 years will be provided after 2 years, while estimates for other sex/age groups will be provided after 3, 4, or 5 years.

- The 1989 CSFII is being designed to accommodate modules from other agencies with concerns relative to nutrition monitoring. A cooperative effort among the Food and Drug Administration (FDA), Food Safety and Inspection Service (FSIS), and HNIS was established to conduct a survey on consumer knowledge and attitudes on diet/health issues as a followup to CSFII. This project represents the first time that a nationwide sample will be used to study the relationship between individuals' actual dietary intake and their knowledge and attitudes about foods and nutrition. Such cooperative ventures build on the FDA experience in conducting attitude surveys and HNIS experience in conducting food consumption surveys.

- Continued updating of the support systems for NFCS 1987, NHANES III 1988-94, and CSFII 1989-96. These systems include food coding, volume/weight conversions, nutrient content of foods, and other complex data files for processing and interpreting data from dietary surveys.
- Continued coordination with DHHS to assure that the monitoring activities of the two Departments meet the needs of Congress and others for information on dietary and nutritional status of the population, yet are as compatible as possible given the different objectives and data needs of the programs of the two Departments.
- Annual estimates of the nutrient content of the national food supply. This series provides the only source of comparable data on trends since 1909 in foods and nutrients available for consumption from the U.S. food supply.
- Assistance for State public health nutritionists and other State and local leaders in the use of USDA's nutrition monitoring data through participation in workshops and the design of research projects focused on the development of data on dietary status particularly useful to each State.

National Nutrient Data Bank. The National Nutrient Data Bank is an essential component of the National Nutrition Monitoring System because it is used in assessing the nutritional quality of diets reported in both USDA and DHHS surveys. The data bank is also a valuable national resource for researchers and educators concerned with food and nutrition, as well as for planners of national and international food and nutrition programs.

- Three sections of Agriculture Handbook No. 8 are planned for release this year: Fast Foods; Veal, Lamb, and Game; and Cereal Grains and Pastas.

- One of the primary problems in keeping pace with health and disease concerns is anticipating which nutrient or nutrients will be a major concern in the future. With limited resources for developing methods and carrying out nutrient analyses, only a few nutrients can receive increased emphasis at any time. In 1985, when it was hypothesized that selenium might be a deterrent to cancer, major emphasis was directed toward determining the selenium content of foods. Because the selenium content of a specific food varies depending on where it is grown, this work required a major sampling of foods across the country. By 1989-90, we expect to be able to add selenium to the nutrient data base for evaluating intakes from the 1989-93 CSFII.

- HNIS is cooperating with USDA's Agricultural Research Service and industry on projects to determine (1) the fat trim on beef sold at retail and (2) the amounts of fat and cholesterol in fresh eggs sold at retail. Recently completed studies with industry included vegetables, broilers, and turkeys.

Nutrition Education. The Agency develops food and nutrition materials and techniques for increasing nutrition knowledge of professionals and consumers and for improving food selection behavior.

Major nutrition education activities underway include:

- Planning is underway to initiate the second Dietary Guidelines Advisory Committee.

- Promotion of the "Dietary Guidelines for Americans," second edition. These guidelines form the basis of dietary guidance policy in USDA and DHHS.

- Interpretation and promotion of the Dietary Guidelines to help the public put the Guidelines to work. Previously, seven short bulletins--one for each of the guidelines--were published. Four others are now in preparation.

- Chairing the USDA interagency Dietary Guidance Working Group, composed of representatives from nine USDA agencies--AMS, ARS, ERS, ES, FNS, FSIS, HNIS, OGPA, and NAL--and a liaison from DHHS. This group convenes for the purpose of reviewing all USDA guidance materials to insure conformity to Dietary Guidelines concepts. Providing a liaison to DHHS's Nutrition Policy Board, Subcommittee on Dietary Guidance. This group has a similar function to USDA's Dietary Guidance Working Group.

- Estimation of costs for food plans at four cost levels monthly. (The least costly of these food plans, the Thrifty Food Plan, is the legal basis for Food Stamp Program benefits.) Data from NFCS 1987 will be used to revise the food content and the costing procedures for the food plans.

- Analysis of data from the surveys to gain an understanding of dietary problems and their causes. For example, researchers are studying changes in eating patterns such as increased proportions of away-from-home meals and snacking and their effects on diet quality.

In summary, HNIS is the national resource for information on the nutrient content of individual foods and of the food supply and on the food and nutrient content of the diets of households and individuals. The Agency conducts research needed for the development of materials and techniques required for helping Americans to improve their diets. We view these activities as basic to the Department's mission to assure that a safe, nutritious, wholesome supply of food is available to all Americans and to provide information with which healthy Americans can select nutritious and healthful diets.

Mr. Chairman, I will be happy to answer any questions you or other Committee members may have.

TEMPORARY EMERGENCY FOOD ASSISTANCE PROGRAM

Senator BURDICK. Mr. Bode, before I pose any questions about the TEFAP Program, I want to thank you for your cooperation with Senators of this committee in keeping us informed of the status of the level of commodities available for distribution, particularly as there has been significant fluctuation in CCC uncommitted inventories.

I am sure you have received as much correspondence as I have inquiring what we plan to do about keeping the channels of distribution open despite dwindling federal stocks of most commodities.

Food banks in North Dakota, Minnesota, Ohio, and Montana are pleased with the release of wheat for processing into pasta for distribution under TEFAP. Frankly, I don't see why perhaps we cannot expand the use of wheat for pasta to other states.

MACARONI MADE FROM NORTH DAKOTA DURUM

Here is an actual package of macaroni [indicating] produced, I believe, in the state of North Dakota, made from a product well known throughout the world as North Dakota durum.

Mr. BODE. Yes, sir.

Senator BURDICK. Very nutritious, very valuable wheat product.

According to your knowledge of current inventories, do you think it may be possible if we expand the use of this pasta throughout the United States?

Mr. BODE. Yes, sir; we have sent the agreement that was the basis for the processing of that durum wheat into pasta to other potential cooperators, and have discussed with them the possibility of their undertaking this sort of arrangement with us.

As you are probably better aware than I, our stocks of durum are somewhat limited, and it was based on that discussion with ASCS that we decided this was the most appropriate mechanism to use for processing durum into pasta for distribution. But we have indicated to groups beyond the group that processed this durum into pasta our willingness to do so, and have had some discussions along those lines.

Senator BURDICK. If TEFAP resources, such as dairy products and rice, are no longer available, how do you think we can offer some supplemental food assistance to former TEFAP recipients?

Mr. BODE. Well, sir, we still have a good deal of butter, flour, and cornmeal that are available for distribution through the Temporary Emergency Food Assistance Program. In addition, we still have some nonfat dry milk distributions that will continue. So, under the Temporary Emergency Food Assistance Program, the distribution of those commodities will continue, though some of the other commodities—cheese, most notably, and rice and honey stocks—have been depleted.

We feel that the Temporary Emergency Food Assistance Program is a very good outlet for those stocks that are in sizable surpluses, beyond the size of surplus needed to provide for the Child Nutrition Programs.

Once those stocks are depleted, we feel it is appropriate that those distributions through the Temporary Emergency Food Assistance Program not continue. Our Food Stamp Program is the first line of defense against hunger.

FOREIGN DONATIONS

Senator BURDICK. I think that the plan that has been in process where we can use this surplus durum, process it and ship it to the hungry people of the world is an excellent program. How will this be funded?

Mr. BODE. The processing of—I'm sorry, sir.

Senator BURDICK. If we provide the material, the durum wheat, whatever it is, I understand that you will process it and ship it to foreign countries. Is that right?

Mr. BODE. Our activities have been focused on domestic food assistance activities. And I am afraid that I am not sufficiently well versed to testify as to what is happening in foreign donations.

I believe that some wheat has been processed into flour for distribution overseas, but not processed beyond flour. If I am incorrect, we would be pleased to correct that for the record.

Senator BURDICK. I understand that you are confined to domestic programs, but isn't this a pretty valuable tool in our export program too? Could we go beyond the domestic program?

Mr. BODE. I understand we have been, sir. I guess I need to defer to others who are working directly with the overseas donations who can better respond to your question.

Senator BURDICK. You understand that North Dakota is the principal durum supplier of the world.

Mr. BODE. Yes, sir; I am aware of that.

Senator BURDICK. And I am trying to find why there isn't a larger market for it.

Mr. BODE. Coming from a wheat-producing area and having spent a number of years working in grain elevators, I know your concerns, sir.

Senator BURDICK. Well, I would think that this pasta would be one of the better products to ship abroad than to send money abroad to needy people. Of course, our own at home, first. And I certainly want to compliment you for giving the support to this program that you have.

Mr. BODE. Thank you, sir.

It has been a pleasure to work with you and your staff on these matters.

FOOD STAMP PROGRAM

Senator BURDICK. I have heard some people argue that the primary form of food assistance should be the Food Stamp Program and the temporary nature of TEFAP should not be forgotten. Can you comment on this view?

Mr. BODE. Sir, that is my belief. We feel that the Food Stamp Program has a number of advantages. One very important one is the added flexibility it provides to the recipients of the system. It allows them to use the government assistance that is provided in a fashion that meets their nutritional needs and desires, and reflects the fact that everybody doesn't have the same dietary needs. Also, when one considers the administrative costs of the program, the Food Stamp Program is a pretty good and effective one.

I might add, sir, the Food Stamp Program also operates in a far more equitable fashion, in that it provides assistance to all people who are in need and make application for food stamps, while the Temporary Emergency Food Assistance Program operates like a temporary emergency program. I believe the majority of the people who have received assistance through the program did not consider it a regular source of food because of its sporadic nature of operation.

DURUM WHEAT IN TEFAP

Senator BURDICK. Well, I understand that it really has not been formulated into a permanent program. Is it more or less a pilot program at the present time or is it beyond the pilot program?

Mr. BODE. I would say it was a real big pilot program. We have had 15 million people receiving assistance through the Temporary Emergency Food Assistance Program since a year or so ago.

Senator BURDICK. That is a big one.

Mr. BODE. That is a big one by my standards. I would say it is a regular operating program, although it is temporary because it is dependent upon having large stocks of surplus commodities.

Senator BURDICK. I understand that under TEFAP that this program of pasta was kind of a special program that was added to the other one.

Mr. BODE. Yes, sir. I am sorry, I misunderstood your question. I was referring to the entire program.

That special processing of durum into pasta is a special grant. The basis for it is an agreement that was reached with the state of Minnesota. We have indicated our willingness to have a similar agreement with others for the processing of durum into pasta for distribution to low-income Americans.

Senator BURDICK. Well, I will use your terminology. It is a big special project, in other words?

Mr. BODE. Yes, sir; but I guess, since I misunderstood your earlier question, I might have mislead you. Considering only the recipients of the pasta, we have a much smaller number. That is not 15 million by any means. The 15 million was the whole Temporary Emergency Food Assistance Program.

Others might be aware of the number of recipients of the pasta.

Mr. BRALEY. Mr. Chairman, that was generally available to people in the Temporary Emergency Food Assistance Program in the states of North Dakota and Minnesota and possibly some surrounding areas in that region of the country. But it wasn't of a sufficient size to make available nationally.

Senator BURDICK. As I understand it, roughly 67,000 households have received donated pasta so far. That is quite a number.

Mr. BODE. I believe your staff is better prepared on this issue than we are.

Senator BURDICK. This comes from the state of Minnesota.

Mr. BODE. That sounds correct to us.

Senator BURDICK. Well, I think it just makes common sense. We have a surplus of durum. It is a very wholesome and nourishing product and I don't know why it shouldn't be used, at least by the people of North Dakota and the United States. But I think a lot of our foreign programs should be looking at this.

Mr. BODE. We have enthusiasm for the project, sir. I guess I was particularly disappointed that an article in the Washington Post yesterday implied that this project was in some way in danger. That is certainly not our view of the matter. We feel that it is a good project and we are quite pleased to be working with it.

Senator BURDICK. Well, that's fine. I hope we can get it off the category of temporary and make it permanent. Think about that carefully, will you, sir?

Mr. BODE. Yes, sir.

FOOD STAMP APPLICATIONS

Senator BURDICK. If food stamps are to be offered to a broader audience, how can we be assured that some needy families are not being inhibited by unnecessary redtape or other problems?

Mr. BODE. Sir, I think the Food Stamp Program is very broadly available, very widely participated in. Over the course of a year, one out of every seven or eight Americans receive food assistance.

Any time we have application requirement, we have some burden that's placed on an applicant for assistance. I think that starts when you ask somebody their name and it goes on from there.

It is our sense that requirements for application for food stamps are reasonable. We have studied the issue of special requirements in the food stamp application process to see if there is a burden or an obstacle to participation presented by those requirements, and have found that they do not constitute a barrier to participation in food stamps. I think we have to constantly be alert to those sort of concerns.

If there are specific requirements as far as you are concerned, we would be pleased to talk with you about them, sir.

FOOD STAMP PROGRAM

Senator BURDICK. If TEFAP is no longer available, would you anticipate an increase rather than a decrease in Food Stamp Program benefit cost in 1989?

Mr. BODE. Sir, we have not proposed a modification in the food stamp benefit structure, and the reason for that is we didn't propose a change for food stamps when the Temporary Emergency Food Assistance Program was started. We have consistently regarded that as a temporary supplemental food assistance effort to make the best possible use of this surplus supply that we had on hand. We are very aware of what is happening in Congress with the budget resolution and look forward to working with you and other members of Congress consistent with the budget agreement.

Senator BURDICK. During the 1988 appropriations process, the estimates for the cost of the Food Stamp Program were revised substantially as a result of the thrifty food plan adjustment, error collection reestimates, and other changes reflected in OMB's mid-session review.

Will the committee be informed of any reestimates that result in changes to the anticipated costs of the Food Stamp Program in 1989?

Ms. KONDRATAS. Yes; we certainly will keep the committee informed of any changes that will affect the budget or the number of recipients or benefit levels.

Senator BURDICK. Are your current numbers still current?

Ms. KONDRATAS. We believe the current numbers are as good as we can get them. We do inform the Congress on the 15th of every month about changes in Food Stamp Program participation.

Senator BURDICK. Ms. Kondratas, the next question is for you.

WIC STUDIES

The 1988 Appropriations bill for USDA included statutory language instructing the Secretary to conduct a national study of savings in the amount of medical assistance provided to newborn participants of the WIC program. The budget proposes to delete this statutory language, yet no explanation is given concerning the status of the study or whether it will be completed this year.

When was this study started? If it has not been started, why not?

Ms. KONDRATAS. We are certainly planning to do that study, and we have requested $3 million this year for WIC studies, compared to the $2 million that we have requested in recent years, because we are undertaking a large number of WIC studies, some mandated by Congress, others that we are doing on our own initiative. We will be doing this particular study.

Contracting takes some time. The study itself has not yet begun, but we are doing it as expeditiously as possible, and we look forward ourselves to seeing the results, because prior studies have provided incomplete data. We think this one will provide us with more information.

Senator BURDICK. From whom are you requesting the money?

Ms. KONDRATAS. Well, we are requesting the money from the Congress. This is part of our budget request, the $3 million is a part of our request.

Senator BURDICK. You are requesting it right here then.

Ms. KONDRATAS. That's right.

Senator BURDICK. When will the study be completed and results released, in your opinion?

Ms. KONDRATAS. I believe that the due date in the law is March 1990, and we will certainly have it completed by then. It will be, I understand from people who are knowledgeable about research in this area, a very tight schedule, but we certainly are gearing up to try to complete the study within that specified timeframe.

Senator BURDICK. That is sometime in 1990?

Ms. KONDRATAS. That's right.

Senator BURDICK. This committee has had a longstanding interest in the types of evaluations that the Food and Nutrition Service conducts relating to the WIC program. In the 1988 appropriations report, FNS was directed to submit a report providing a brief description, the status, completion date, and cost of all ongoing studies and evaluations by March 15, 1988. Has this report been completed?

Mr. BRALEY. Mr. Chairman, I am not sure we are focusing on the report to which you referred. It was required where?

Senator BURDICK. It is in the Senate committee report that we ask this be done.

Ms. KONDRATAS. I would be very happy to provide that information. I have information on the current status of WIC studies right here before me. As Mr. Braley said, we were not aware that we were to have it submitted by March 15, but I will be very happy to include it as part of the record for this hearing.

Senator BURDICK. Very good.

Ms. KONDRATAS. Or if you would like, I could read it now, but I think that might take more time than you would like.

Senator BURDICK. That will be fine. And you will submit it within a reasonable time?

Ms. KONDRATAS. Yes, certainly.

[The information follows:]

WIC CURRENT STUDIES

	Cumulative Costs thru FY 1988 EST	FY 1989 Costs EST
WIC Analytic Research Projects This is an ongoing series of contract assisted analyses on topics such as income distribution and nutritional risk using existing data bases such as those created by the National WIC Evaluation and the first WIC Participant and Program Characteristics Study.	$496,628	$141,000
WIC Administrative Costs Study This study examines components of administrative costs in 16 case studies representing a wide range of local agency characteristics. The study is nearing completion and should be published later this year.	$582,913	-0-
WIC Income Verification Study -- Quality Planning Corporation This study will determine the extent of WIC certification error and examine ways, if necessary, to upgrade program quality assurance procedures. Estimated completion: January 1989.	$861,882	-0-
WIC Breastfeeding Promotion and Demonstration Study -- Development Associates, Inc. This study will identify, evaluate, and demonstrate effective approaches to breastfeeding promotion in the WIC program. Study completion date: March 31, 1990.	$366,000	$125,000
WIC Participant and Program Characteristics -- Research Triangle Institute This is a (P.L. 99-500) legislatively mandated study to report WIC program and participant characteristic including, nutritional risk and migrant status to Congress every 2 years. The first biennial report will be submitted to Congress in 1989. Costs through Fiscal Year 1988 are $1,171,000 for work related to providing the first 2 reports to Congress.	$1,171,000	$500,000

	Cumulative Costs thru FY 1988 EST	FY 1989 Costs EST
WIC Vendor Management Study -- Professional Management Associates This study is collecting information from all States on their practices, policies, and resources devoted to vendor management in the WIC program. This includes the methods used to select, train, monitor, and investigate retail food stores authorized to accept WIC food vouchers. The study focuses on methods used to detect, deter, and sanction occurrences of fraud and serious forms of program abuse. A final report is expected in January 1989.	$750,000	-0-
WIC Eligibility Study -- Sigma One Corporation The report of the WIC Eligibility Study was issued in July 1987, including baseline (1979) and updated (1984) detailed estimates of the WIC eligible population and program coverage at the national level. Additional volumes of detailed State and county estimates for the 1979 baseline period were released this April and a further update (to 1986) at the national-level estimates will be completed later this year.	$255,000	-0-
WIC Benefit Targeting Study -- Cosmos Corporation This is a 3-year project to assist State and local WIC agencies in achieving better targeting of benefits to high-priority eligibles. Emphasis is on effective ways of reaching "hard-to-reach" women during pregnancy (e.g., ethnic or cultural minorities, migrants, recent immigrants, teenagers). A report of the project's first phase is currently in Agency clearance. Estimated project completion: September 1989.	$300,000	-0-
WIC Child Impact Research Design --University of North Carolina at Chapel Hill The aim of this project is to determine the feasibility of conducting a study of the impact of WIC on infants and children. Study completion date: October 3, 1989.	$146,500	-0-

	Cumulative Costs thru FY 1988 EST	FY 1989 Costs EST
Wayne County Smoking Reduction Project -- Cooperative agreement with Wayne County, Michigan Department of Health This project will assess the effectiveness of two different smoking reduction programs directed at low-income women of childbearing age and will examine the relative costs and benefits of the programs to the county health department. Estimated completion: September 30, 1989.	$315,430	-0-
CDC Smoking Cessation (SCIP) -- Interagency Agreement with CDC; cooperative agreements with 3 States The Smoking Cessation in Pregnancy (SCIP) project is a cooperative effort of FNS and the Centers for Disease Control to demonstrate the effectiveness of WIC and prenatal clinic smoking cessation interventions in three States--Colorado, Missouri, and Maryland. Estimated completion: September 30, 1989.	$610,000	-0-

WIC NEW STUDIES

Study of Medicaid Savings for Newborns from the WIC Program
—To Be Awarded
As required by P.L. 100–237, this study will assess the cost savings in infant care in Medicaid and State-indigent care programs from the mother's prenatal participation in the WIC Program. The report is due to Congress February 1, 1990.

Study of Nutrition Services and Administration Funding
—To Be Awarded
As required by P.L. 100–237, this study will assess the appropriateness of the percentage of the annual appropriation for nutrition services and administration in the WIC Program. The report to Congress is due March 1, 1989.

Systems Rehabilitation Project
—To Be Awarded
This project involves modifications to facilitate end user operations for two computer systems. One system allows users to evaluate the impact of changes in the nutritional content and cost of food packages for three FNS programs. The other system enables FNS to estimate commodity support by converting purchased food items into farm-level agricultural commodities.

Senator BURDICK. What specific efforts has the Food and Nutrition Service undertaken to redirect the types of studies and evaluations of the WIC program to improve the administration of the program as directed by the Congress in report language accompanying the 1988 Appropriations Act?

Ms. KONDRATAS. We are doing an administrative cost study which examines components of administrative cost in 16 case studies which we believe represent a wide range of local agency characteristics. That study is now nearing completion and it will be published later this year. We have also begun a study of WIC administration which will analyze the impact of rebates and other systems on administrative costs and quality of service. This study should be completed by the date required in the committee's report.

Senator BURDICK. We have been joined by two illustrious members of this committee. The Senator from Wisconsin, I believe, was here first.

CONCURRENT RESOLUTION

Senator KASTEN. Mr. Chairman, thank you very much. The Senate budget resolution includes an additional $500 million for nutritional programs and agricultural functions. These programs include the Temporary Emergency Food Assistance Program [TEFAP]. I have a number of questions as to how you might use that additional money.

I guess, first, what kinds of surplus commodities right now remain available for distribution to the needy this year?

Mr. BODE. Senator Kasten, I am John Bode, Assistant Secretary for Food and Consumer Services. Presently, butter, flour, and cornmeal are being distributed. We are still distributing some nonfat dry milk, but the levels of nonfat dry milk were greatly reduced. Our ability to continue those distributions through the Temporary Emergency Food Assistance Program is certainly in question. I don't think we will be able to keep distributing them at the same rate very much longer.

We have discontinued distribution of cheese, rice, and honey because of depletion of those stocks. That is the status of commodity distributions through the Temporary Emergency Food Assistance Program. Of course, many commodities are distributed through other outlets, particularly through the Child Nutrition Programs.

DAIRY ACQUISITIONS

Senator KASTEN. We have seen some estimates from some of the dairy economists, that USDA may purchase as much as 8 billion or more pounds of dairy products under the price support program as a result of the rise in milk production.

I am told that roughly 4 billion have already been purchased. If these estimates are at all correct, and you left out cheese and a little bit of that dry milk, if these estimates are correct, then most of the purchases will occur during the next couple of months, during the spring flush. Would these commodities, especially the cheese, then be available for distribution under the emergency program?

First of all, do you agree with me that it is clear that we are going to be buying these products? But then will it be available?

Mr. BODE. First of all, I don't want to claim tremendous expertise in the analysis of projected acquisitions of dairy commodities. It is my understanding there is some difference in our projections of acquisitions on the part of the Department and those from industry. I have met with representatives of industry on that subject.

I feel confident though that we will be able to distribute quickly and effectively those dairy commodities that we have in stocks, whether the acquisitions are significantly higher than our current projections or not.

I am concerned though that even if the acquisitions are significantly higher than our current projections, there may not be enough to distribute them through the Temporary Emergency Food Assistance Program because the Child Nutrition Programs may make full use of that cheese, for example.

At present, we are very concerned that we will not be able to fully meet the requests of states for the Child Nutrition Programs this fall when the requests from schools for commodities are highest.

Senator KASTEN. The point, John, that I am getting at though is you are not talking about ending the temporary emergency program. It is just a matter of suspending the distribution of surplus commodities until those surplus commodities become available to you. Is that right?

Mr. BODE. That is absolutely correct.

Senator KASTEN. Can you assure us that as soon as those commodities become available to you for this program that they will, in fact, be distributed?

Mr. BODE. Yes, sir; that's absolutely right. And we are continuing to distribute the commodities that we have in stock so the mechanism will be there and available.

Senator KASTEN. I see. Thank you, Mr. Chairman.

Senator BURDICK. Senator Grassley.

Senator GRASSLEY. Thank you, Mr. Chairman.

Ms. Kondratas, I would like to start with you. Did I pronounce your name wrong?

Ms. KONDRATAS. No, sir; that is correct. Thank you.

FOOD STAMP—QUALITY CONTROL

Senator GRASSLEY. Your testimony refers to the USDA National Academy of Sciences' study on the quality control system. As you know, an extraordinary number of states have received notification of sanctions for excessive errors. And these rates are, of course, applicable to the Food Stamp Program.

It seems to be unfair to these states and their food stamp recipients for the USDA to proceed with sanctions, even though the analysis has not yet been released. I have cosponsored legislation with Senator Evans, which happens to be S. 1440, which would impose a moratorium on the sanctions. Has the Department considered a self-imposed moratorium on sanctions in light of the pending report?

Mr. Bode. Senator Grassley, I am John Bode, Assistant Secretary for Food and Consumer Services. If I may interject.

Senator Grassley. Do, please. I am more interested in the answer, than who answers.

Mr. Bode. All right.

The National Academy of Sciences has now filed its report. It earlier filed a food stamp report. The most recent report to be filed concerns, in particular, AFDC and Medicaid, with a continuing issue from food stamps. So the reports are now filed.

Senator Grassley. When were they filed?

Mr. Bode. The most recent one, the one concerning AFDC and Medicaid, I believe was released in March. Last year, the food stamp report was provided to Congress.

We feel that it is important to keep in mind that, particularly with the Food Stamp Program, where all of the benefits are paid for by the federal government, and the program is administered by the states, that the states need to be given a strong incentive to minimize any abuse of the program or any waste in its administration. And, that is why we feel this system that would have states pay for about 10 percent of the cost of the errors made since it was started is appropriate. With the states making over $800 million in overissuance errors annually, the states will have a strong incentive to minimize errors in the Food Stamp Program when they begin paying the sanctions.

Senator Grassley. It is our understanding that you are right, that the report was filed. But I guess the key point I was making is, have you taken any action on that report? Also, whether or not you have taken any action on that report, is it legitimate that the sanctions are imposed?

Mr. Bode. It is our reading of the report that it did not find problems, did not find errors, if you will, in how our quality control system calculates rates of error in the Food Stamp Program.

It did make some suggestions with which we have some sympathy for about how the quality control system could be restructured so that it would be a sounder system.

For example, the idea of including consideration of underissuances in the quality control sanction system, so that it is very clear that our concern is payment accuracy. Not just overissuances, but all kinds of errors should be minimized in the Food Stamp Program. But that is more of a statutory issue rather than a regulatory one. And it does not in any way, I think, detract from how the present quality control system, as it is mandated in the statute, was implemented.

FOOD STAMP SANCTION WAIVERS

Senator Grassley. Many states, including my own, which have received notification sanctions, have applied for good cause waivers. Has any action yet been taken on any of these waiver requests?

Mr. Bode. Some good cause waivers have been granted. We have taken longer than I wanted to in consideration of some of the pending good cause waivers. And the reason we have done that, Senator, is we wanted to be sure that those good cause waiver requests were given careful consideration and approved if they were warranted.

I think the easiest thing for a bureaucracy to do is say no. What we are trying to do here is give those good cause waiver requests careful consideration and approve them if and when warranted.

Senator GRASSLEY. If those waivers have not been granted, then what information would those states have received regarding their food stamp distribution policy?

Mr. BODE. I guess I don't understand what type of information concerning the——

Senator GRASSLEY. I am concerned about the time period in between the notification they have, the penalties involved, and then their request for good cause waivers. They would hope that they would get a positive response to the good cause waiver.

Mr. BODE. Yes, sir.

Senator GRASSLEY. There is a certain amount of unknown here for these states at that particular time.

Mr. BODE. I understand, sir.

Senator GRASSLEY. What are you doing to assist them with during that period of time?

Mr. BODE. Yes, sir; I see your point.

FOOD STAMP—QUALITY CONTROL

The states are aware of the basis for the error; what has caused the error. The state actually does the initial calculation of the error rate. So we are working with them with that particular information to prevent errors in the future. So the important information about the basis for errors is fully available to the states and can be used to expeditiously correct administrative problems.

Senator GRASSLEY. So the states are assisted in this period of time?

Mr. BODE. Yes, sir.

We feel we have got a——

Senator GRASSLEY. All right.

So you are working with them until they are fully aware of what the standards are.

Mr. BODE. To help reduce errors; to help them prevent errors in the future. The information that is provided in the quality control system about how errors are made is fully available to them and can be used to make administrative corrections.

NATIONAL ACADEMY OF SCIENCES STUDY

Senator GRASSLEY. I assume that you are still reviewing the study by the Academy of Science.

Mr. BODE. Yes, sir. In fact, sir, we have already fully reviewed the National Academy of Sciences' report and given that careful consideration. We have talked with members of the Academy panel, and have testified before authorizing committees about our ideas for how the quality control system could be made a stronger system.

Senator GRASSLEY. With your full analysis of the study still pending, would the standards be changed as a result of this study? It seems to me that no state is going to be able to make adjustments until after that analysis is submitted. Yet, you have not adjusted your policies on the sanctions.

Mr. BODE. Well, sir, maybe I am not fully understanding. If I may try to respond.

Senator GRASSLEY. Maybe I am not understanding your answer.

Mr. BODE. Well, I will try to be more clear.

The report from the National Academy of Sciences, which we received some time ago, did not indicate that there were problems in how quality control error rates are calculated. The threshold for errors in the Food Stamp Program is set by statute. Since the method of calculating errors is a sound one, our application of the calculated error rate against the statutory threshold is one that I think is a pretty clear-cut operation.

With the Academy's report focusing on how the food stamp quality control system could be better structured, we saw the report as looking forward, about how things could be improved, not one that necessarily discouraged the present operation. And certainly, it did not provide evidence that we should abandon the present system. It is a very important system, and it has been keyed to a significant reduction in food stamp error rates. Since I joined the Department, the decline in error rates has reduced costs for the Food Stamp Program by some $700 million.

Senator GRASSLEY. It appears that you may be caught between a very specific policy set by Congress and carrying out that policy in the best administrative way with the people who are responsible for meeting the goal.

RETROACTIVE QUALITY CONTROL REGULATIONS

Let me point out one of the problems expressed by our Director of Human Services in my state. Nancy Norman, our Commissioner, says that one of the factors contributing to error rates higher than federal tolerance levels is that federal regulations are released with retroactive dates. Then she gave examples in her letter.

Mr. BODE. Sir, I am sure she has specific examples. And, I can tell you that occurred when the law was changed.

Senator GRASSLEY. I am not saying that it is wrong for you to do that. I am only raising a question that that should not be taken into consideration for calculating error rates. That is my question. Does the USDA adjust for this when computing the error rate standards, since states cannot comply in periods of time during which they did not have the specification?

Ms. KONDRATAS. Yes, sir; we do. Usually when we have retroactive regulations it is because the law required us to implement something by a certain date. But when we do that, we do excuse any errors made in that period when the state could not have known what the law was. We do excuse them from quality control sanctions.

Mr. Bode. We excuse the errors that are specific to that regulation.

Senator Grassley. All right.

So you are saying that though there is a time lag, in the final analysis it does not make any difference in the calculation of error rates. That is not going to penalize the states.

Mr. Bode. Yes, sir; we don't hold the state responsible for doing something inconsistent with a rule they did not know existed.

Senator Grassley. From the correspondence that I have received, I am not sure that I understand this to be applicable in our state.

You are saying, then, that if there is some other problem, we cannot use retroactive dates as an excuse, because you have already taken that into consideration.

Mr. Bode. Yes, sir.

I have talked with Commissioner Norman a number of times, and we would be pleased to get in touch with her and talk with her about that again. I suspect that her concern is in a broader sense the retroactive implementation of a regulation that seems distressful to the overall operation of the program. And, I have some sympathy for that. It is tough for states to retroactively implement regulations.

Senator Grassley. Mr. Chairman, I have one other question and I will submit that for the record.

Senator Burdick. Very fine.

Now we will hear from the Senator from Arkansas.

Senator Bumpers. Thank you, Mr. Chairman.

Ms. Kondratas, would you pull your microphone just a little closer, please?

Ms. Kondratas. Certainly.

Senator Bumpers. Thank you.

WIC ELIGIBLE POPULATION

First of all, I am told that the amount of money we put into the WIC program serves about one-third of those who ought to be receiving services under that program. Is that a fair statement?

Ms. Kondratas. Funds are sufficient to serve about 40 percent of those who are eligible by law. But the eligibility requirements, or the eligibility standards, are quite broad. They go up to 185 percent of poverty, and also they allow people to be eligible for both nutritional risk and dietary risk factors. We have tried to target the program because it does not serve all those who are eligible by statute. And, we find that we serve a much higher proportion of the high-risk groups.

WIC PRIORITIES

For example, 9 out of 10 infants in high-risk groups that are in the poverty population receive WIC benefits. In fact, one out of four infants born in the United States is on the WIC program. Of the high-risk category, two-thirds of pregnant women under the poverty line receive WIC services. And, we find that some of the participation is self-selecting. In studies of the income distribution of WIC recipients, we find that the poorer eligibles are more likely to be on the program than those with higher incomes and some of that may be due to self-selection. It is not clear that, even with 100 percent funding, we would have 100 percent participation. We certainly do not in any other federal program.

WIC FUNDING

Senator BUMPERS. Does this mean then that since we do not put enough money in this program to serve everybody under the threshold level of 185 percent that you try to target those who are the neediest within the group? Is that what you are saying?

Ms. KONDRATAS. Yes, sir; that is right.

Senator BUMPERS. So, in short, Congress, on the one hand, is setting a threshold, and on the other hand, giving you about 40 percent enough money to meet that threshold. Is that right?

Ms. KONDRATAS. Well, I don't think that the history of the program works quite that way. I think actually the program has been expanding quite rapidly. I think when the thresholds were set, it wasn't the main focus of the Congress to see how many eligibles there were.

I think the program has been expanding and serving more and more people every year. So that, in effect, we have been doing more every year in serving the population of women, infants, and children.

I think that, considering the current budget situation, the WIC program has done extremely well, and I think that is good because it serves a very vulnerable population. But I don't think that the Congress should blame itself for inadequate levels of funding because I think you have done quite a job over the past few years in increasing spending in this program.

Mr. BODE. If I may, Senator. As I understand, having worked with the program for a number of years, it has always been viewed as a grant program with the mandate for a priority system in the WIC program reflected in the statute. So the program structure has been very consistent in that regard.

And the rationale used for some rather broad structuring of the threshold, if you will, was to give flexibility. So that a high level of income would not necessarily preclude someone who is otherwise in significant need of the benefits of the WIC program from receiving it. So those thresholds were set broadly with the intention of giving flexibility at the local level to target a system for those in various needs.

WIC PRIORITY SYSTEM

Senator BUMPERS. Well, if a woman comes in during the first 3 months of the year, and you have so much money to last you all year, for assistance—let's say nutritional assistance because she is pregnant—maybe she has not been referred by a doctor as a high-risk person, but still she is well below the 185 percent poverty line. How do you make a decision at that stage of the game to make sure you are not going to run out of money before the end of the year as to whether to fund her or not?

Ms. KONDRATAS. I don't believe that at that point we make the decision, because, as Mr. Bode pointed out, it is a grant to states. I believe the WIC clinics——

Senator BUMPERS. At that point, if she is eligible, do you——

Mr. BRALEY. Senator Bumpers, in most situations, and in virtually all situations, there is normal caseload turnover at a local clinic, and a high-risk, pregnant woman that would come into that setting would, in almost all circumstances, be able to be served. It would be a rare case that a high-risk, pregnant woman early in her pregnancy, given the priority status given to them, would not receive benefits. It would be an unusual circumstance.

Senator BUMPERS. What is going to determine whether she is high risk or not?

Mr. BRALEY. There is a medical screening in terms of some blood measures, as well as dietary patterns and other, similar, evaluations. And, if she has a medical-related problem that would affect her nutritionally, she would be put in the highest priority category.

Senator BUMPERS. But what if it is just a straight nutritional problem. She does not have the amount of food that a pregnant woman ought to have to feed herself and her fetus?

Mr. BRALEY. There again, typically she would be in a high enough risk category that she would probably get in. There are some pregnant women who have an inadequate dietary pattern which is based on a recall over 24 hours of what they have eaten. They would be in a lower priority than someone who came in with a low hemoglobin count or some other, more precise measure. The whole priority system is structured in a way to get priority service for the people for whom the benefits of the program have been demonstrated. I don't think there are very many pregnant women who are unable to be served in fairly short order.

Senator BUMPERS. Is it Mr. Braley?

Mr. BRALEY. Yes, sir.

Senator BUMPERS. Mr. Braley. I am a little confused. If it is true that we are only serving 40 percent of the people who are eligible under the guidelines because that is all the money we are putting into it, you seem to be telling me that nobody is being excluded. And that is inconsistent to me.

Mr. BRALEY. Well, Senator, the women who participate in the program make up only about 25 percent of total participants.

Senator BUMPERS. I was just using that as an example. But somebody, infants or women or children, have to be excluded. If we are only putting 40 percent as much money in here as we could use, as opposed to funding everybody who is eligible, somebody has to be excluded.

Mr. BODE. Sir, I believe that we have gotten on different tracks. The example you used was of a pregnant woman who is treated as a high priority. Lower in the priority structure would generally be the children over 1 year of age, and that is the group that is not being served at the same rate.

I believe Mr. Braley's response was very much on target with respect to the example you gave of pregnant women. But we misunderstood your point with respect to the part of the population that was not being covered.

Senator BUMPERS. Well what you are saying I take it then, Mr. Bode, is that there are a lot of people out there who are not being served.

Mr. BODE. Of the potentially eligible population, yes, sir. That is the data we referred to before. And, we referred to it in the context of a priority system. That, we feel, is one of the strengths of the WIC program. It is providing assistance where the assistance is most needed.

Senator BUMPERS. I agree with that. And I am not suggesting that we add 60 percent to the budget. We haven't got the money if we wanted to. You know, the number of laudable causes are limited and our ability to fund them is zero. But I was just trying to elicit some information here about how you spend this money in light of the fact that an awful lot of eligibles are not being served. And as I understood Ms. Kondratas, it is that you are doing it on a targeted basis. And I assume that you are not deliberately turning very many people down who come in if you consider them to be high risk.

KNOWLEDGE OF WIC AVAILABILITY

And I also understand that one of the problems with this is that an awful lot of women are not familiar with the program and do not know it is available. Is that correct?

Ms. KONDRATAS. I don't think we have very specific knowledge about who does not know about the program. It is certainly as widely known as other food assistance programs. It is in the press. I think people talk about it. I think pregnant women, when they come to clinics, are given information on it. But I don't think that we have any accurate knowledge of who does not know about it.

Senator BUMPERS. Do most of them find out through clinics rather than just hear it by word of mouth or come into somebody in the WIC program? Do they get their information from their doctor or the clinic?

Mr. BODE. I believe that is the case, sir. That is my sense of it.

Senator BUMPERS. I think that is true in my state.

Mr. BODE. I should mention too that we do have outreach for high-risk groups in the WIC program.

Senator BUMPERS. Do you consider children over 1 year of age as not targeted? If you have healthy children over 1 year of age, then you don't do much for them. Is that correct?

Mr. BODE. Sir, they are certainly included in the broader eligible population that we referred to at the beginning of this discussion. In terms of the relative ranking in the priority system, they are lower than the children under 1 year of age and pregnant women.

Mr. BRALEY. And again, Senator, there is a distinction between the type of condition that their eligiblity is based on. If it is an inadequate dietary pattern, that is a lower priority than if they have a physical problem like low hemoglobin or stunted growth. Currently, about one-half of the participants on the program are children over 1 year of age.

Senator BUMPERS. Is the WIC program essentially a nutrition program?

Mr. BODE. I would say it is a combination, sir, of that and the health benefits received. Some local WIC professionals say that one of its primary benefits is serving as an incentive for people to get the health care that they need and that is available.

So, I think it is a combination of a nutrition and health program.

Senator BUMPERS. Well, I just think it is a very cost effective program. And, quite frankly, you know, if I were President I would change our priorities to fund this program at a much higher level, because I think nutrition for pregnant women and for babies is critical to the national health. And I consider that vital to our national security.

NUTRITION ASSISTANCE FOR PUERTO RICO

Let me ask you, on the Food Stamp Program, do we spend almost $1 billion a year on food stamps in Puerto Rico?

Mr. BODE. It's a nutrition assistance grant that goes to Puerto Rico in lieu of the Food Stamp Program that has operated there prior to July 1982.

Senator BUMPERS. But if we were operating it ourselves, it is essentially the same program in Puerto Rico?

Mr. BODE. The funding is about the same as when they had the Food Stamp Program. The way they operate the current grant program, there is a difference. It is probably more sensitive to the unique needs of Puerto Rico.

FOOD STAMP PARTICIPATION

Senator BUMPERS. How many people in this country receive food stamps during the course of a year?

Ms. KONDRATAS. It varies, depending on economic conditions. I believe that the most recent figures indicate somewhat under 19 million a month are receiving food stamps.

Senator BUMPERS. Did you say 19 million?

Ms. KONDRATAS. Under 19.

Senator BUMPERS. Under 19 million?

Ms. KONDRATAS. Under 19 million. It is now 18 million, because the unemployment rate continues to come down, and economic conditions continue to do well.

Senator BUMPERS. Incidentally, I notice that your funding request is based on a 5.75 unemployment rate. Is that correct?

Ms. KONDRATAS. That is right.

Mr. BODE. Senator Bumpers, you requested the information over a year, and that is significantly different than the monthly participation that Ms. Kondratas referred to.

Our estimate is approximately 33 million people over the course of a year participate because many people are in those economic hard times for a relatively short period of time and move off of the Food Stamp Program as their circumstances improve.

Ms. KONDRATAS. Sir, it is approximately 1 in 13 Americans that receives food stamps in a given month, but as many as 1 in 7 Americans receives food stamps sometime during the course of a year.

Senator BUMPERS. One in seven will receive food stamps during the course of a year?

Ms. KONDRATAS. That is right.

Senator BUMPERS. And what was the other figure?

Ms. KONDRATAS. It is 1 in 13, approximately, 1 in 13, perhaps 14, if conditions continue to improve, receives stamps during every month.

Senator BUMPERS. How is that compared with 10 years ago when this program began?

Ms. KONDRATAS. I am trying to think of 1978.

Senator BUMPERS. Well, make it 5 years ago. How does that compare?

Mr. BODE. It is lower than 5 years ago and a bit higher than 10 years ago, Senator. Five years ago we had economic conditions that were significantly different than today. Now, unemployment is down from 5 years ago. Ten years ago we were operating with a little bit different Food Stamp Program because of a number of changes made in the 1981 act and the 1985 act. Also, the changes from the 1977 act were just getting implemented. Exactly 10 years ago, I don't think the purchase requirement had been eliminated, and that made a big, big difference in the structuring and the scope of service in the Food Stamp Program.

Ms. KONDRATAS. I do have the exact figures for average participation in the years that you requested. In 1978, there were 14.4 million food stamp participants. In 1983, there were 21.6 million. Again, even though we were coming out of a recession, there still was very, very high unemployment that year. In 1987, we had an average of 19.1 million food stamp participants.

Mr. BODE. This is average monthly participation.

Senator BUMPERS. But you said a moment ago—and I want to be sure I have got this—over a period of a year, 33 million people will get food stamps.

Ms. KONDRATAS. That is right, approximately.

Senator BUMPERS. Do we have enough funding so that anybody who is eligible for food stamps can get them?

Ms. KONDRATAS. Anybody who is eligible for food stamps and applies for them can get them.

Senator BUMPERS. All right.

Ms. KONDRATAS. Our request is always based on our projections of what is likely to happen, but we are not allowed to turn anyone away.

MAIL ISSUANCE OF FOOD STAMPS

Senator BUMPERS. Incidentally, do we mail food stamps now to some people?

Mr. BODE. It depends, sir. It operates differently in different parts of the country. We give states a good deal of flexibility in determining how to issue food stamps because the whole country——

Senator BUMPERS. Well sometimes it goes out with their SSI checks, doesn't it?

Ms. KONDRATAS. We have had some food stamp cash-out demonstrations with the SSI population, where the benefit is given not in food stamps but in cash form in several states. But that is not the same thing as mail issuance of the coupons themselves.

Mr. BODE. If I may put in a plug, sir. We have given states a good deal of flexibility in how to structure their issuance of the Food Stamp Program but also held them responsible for how that was done. Because of this, we have cut the cost, the misspent dollars, the waste, if you will, in mail issuance of food stamps by two-thirds. So we have had a significant reduction by giving states that flexibility, but holding them responsible for how it was done. Mail issuance losses are down by two-thirds.

ELDERLY FOOD STAMP PARTICIPANTS

Senator BUMPERS. Of the 33 million people who drew food stamps last year, how many of them were over 65?

Mr. BODE. Eight percent, sir.

Senator BUMPERS. Eight percent?

Mr. BODE. Yes, sir.

Senator BUMPERS. That is much lower than I had anticipated.

On your so-called NPE Program, the National Program for the Elderly?

Mr. BODE. Yes, sir.

NUTRITION PROGRAM FOR THE ELDERLY

Senator BUMPERS. Or is it the Nutrition Program for the Elderly?

Mr. BODE. The Nutrition Program for the Elderly.

Senator BUMPERS. You stated that you served 230 million meals last year. Is that mostly meals that are served in these senior citizen centers?

Mr. BRALEY. Yes, Senator, that is correct.

Senator BUMPERS. Well, do you furnish the commodities for those, or do you furnish the full food for those? I thought the Office on Aging had a big part of that.

Mr. BRALEY. They do, Senator. They provide grants through the aging network at the state and local level, and then we supplement the meal service. They are given the option of taking that assistance in commodities or in cash. By far the lion's share of what they have taken in recent years has been in cash. We have been working with them to try to encourage greater commodity usage in recent years.

Senator BUMPERS. How do you determine the amount of cash they are going to get? What is the threshold on that?

Mr. BRALEY. They make that election, Senator, at the state level.

Senator BUMPERS. I know they make the election to take cash rather than commodities. My question is: How do you determine how much cash they are eligible to receive?

Mr. BRALEY. They receive 56.76 cents a meal, and that is established in the Older Americans Act as a rate of payment per meal to subsidize those activities.

Senator BUMPERS. Well now, in these senior citizen centers people who can afford to pay are supposed to pay. For example, in my little own hometown they pay, I believe, 50 cents. Incidentally, somebody keeps them scared all the time that they are going to go to a dollar, and, you know, some of them figure they are not going to be able to eat there any more. They don't mind paying 50 cents, but they don't think they can afford a dollar.

So I go home occasionally and quiet the anxieties and tell them that we are not going to raise the price of meals, and we are going to fund the program, and so on. But in any event, in the one in my hometown, they pay 50 cents if they want to, and if they don't, they don't pay anything. It is a voluntary thing.

Mr. BRALEY. That is correct, sir.

Senator BUMPERS. All right.

But you are not interested in that. You just say tell me how many meals you served and we will give you 56 cents in cash?

Mr. BRALEY. That is correct, from our point of view.

Senator BUMPERS. So if David Rockefeller eats in this center you send 56 cents for him just like you do anybody else. Is that right?

Mr. BRALEY. That is the way it operates right now, Senator, yes.

Senator BUMPERS. Well, I feel a little better about that program as a result of what you have just told me. My wife and I have been taking care of a little woman for many years because she took care of us. And she could afford the 50 cents, but she doesn't want to. She has money. But as she gets older—and she is 90 years old now—she figures she is going to starve to death before she dies.

But all I am saying is she really frets and worries about it. She, on the one hand, feels like she ought to pay the 50 cents; on the other hand, she doesn't feel like she can afford it. And she has been terribly agitated and upset and worried about whether they were going to go to a dollar or not, not because of her, but because of some others that she worries about.

But I think, frankly, that those senior citizen centers and that feeding program are excellent. She does not go to them any more; they bring it to her. She gets a meal 5 days a week at noon delivered to her. Believe you, me, that is a real load off me and my wife. We really love that program because it takes a lot of anxiety out of our lives, knowing that she is going to get at least one warm nutritious meal a day.

But all I want to say is I think that it is the best program that the U.S. Government funds, because I go to that center, and I see those people. And it isn't just the nutrition, it is the social intercourse; the alleviation of the unrelenting loneliness, which is the worst disease in the world, that they enjoy there. So I am a real caretaker of that program and you have just told me something that makes me feel a little bit better.

Mr. Chairman, I just want to ask Ms. Kondratas, what were you doing before you had this job?

Ms. Kondratas. Before the current job, I was Director of the Office of Analysis and Evaluation at FNS.

Senator BUMPERS. In the same program?

Ms. KONDRATAS. That was in the same agency, that is right.

Senator BUMPERS. Thank you.

Thank you, Mr. Chairman.

DIETARY GUIDANCE

Senator BURDICK. I think my next question is going to be for Dr. Sims. Very recently, the National Research Council released a report entitled "Designing Foods"—no doubt you have seen it—that has some people alarmed about the common misconceptions of the American public about the foods they are eating.

What educational efforts is the Human Nutrition Information Service planning to implement in response to the recommendations of the National Research Council? What plans does USDA have generally?

Dr. SIMS. Yes; we are familiar with the publication that you cite. Several members of my staff worked on that report to provide information from our dietary surveys to show the role of animal products in the diet today. Our data are used for several of the tables in that publication.

In terms of dietary guidance, HNIS has a very active program, and we work in conjunction with the Department of Health and Human Services on this. Within the U.S. Department of Agriculture, we have a dietary guidance working group that reviews every single publication that comes out of USDA to ensure that the information contained therein is in conformance with the principles for the dietary guidelines for Americans. That publication, as you recall, was revised and issued jointly by USDA and DHHS in 1985.

We are working now, and hopefully will be reinstating another dietary guidelines advisory committee so that they can review the recommendations in that previous document and bring it up to date.

So we are actively involved with providing research-based dietary information to the Americans.

HNIS PUBLICATIONS

Senator BURDICK. If new educational efforts that you referred to are to involve published materials, will these materials be self-explanatory or does it require someone to interpret it?

Dr. SIMS. We feel very strongly that we want to provide information to the public that is certainly self-explanatory, sir. We take this as incumbent upon our responsibilities as a federal agency.

We are very pleased to have released bulletins in 1986, called "Dietary Guidelines and Your Diet," Home and Garden Bulletin 233, Nos. 1 to 7, which help the American public incorporate information from "Dietary Guidelines" into their own diets.

Currently, we are hard at work at producing another set of bulletins which will take the total diet approach and provide information on how one can incorporate "Dietary Guidelines" when shopping, when preparing meals, when planning menus, and when eating out. And, we hope that those publications will be available in late 1988.

As I mentioned in my testimony, we have also just released a teacher's guide, as well as a kit of materials for home economics teachers so that they can also teach the principles of "Dietary Guidelines" to their students.

DEFINITION OF HUNGER

Senator BURDICK. USDA asked the National Academy of Sciences to develop standard definitions of hunger, malnutrition, and related nutritional status terms. Were these definitions ever achieved? If so, for what terms? And what steps have been taken to develop standard definitions for these commonly used and commonly misconstrued terms?

Mr. BODE. I am sorry, sir. I do not recall our having made that request to the National Academy of Sciences.

Senator BURDICK. Pardon.

Mr. BODE. I do not recall the Department having made that request of the National Academy of Sciences.

Senator BURDICK. Are there standard definitions?

Mr. BODE. I will have to check to find out what the response was and how it was handled, sir. I just do not know

Senator BURDICK. Please prepare something for the record for us on that.

Mr. BODE. Yes, sir.

[The information follows:]

A DEFINITION OF HUNGER

Standard definitions for hunger, malnutrition, and related terms were not found. The President's Task Force on Food Assistance published the following definition of hunger in its January 1984 report:

"The medical definition of hunger would be a weakened, disordered condition brought about by prolonged lack of food. In adults, the result of such hunger is a loss of weight leading eventually to reduced physical strength or impaired function. In children, the effect of prolonged lack of food is slower growth, or halted growth if the lack is severe enough, and loss of weight."

SUBMITTED QUESTIONS

Senator BURDICK. I thank you all.

There will be some additional questions submitted to the panel from Senators Sasser, Specter, Cochran, Grassley, Kasten, and myself. And I trust that you will get them back to us in a reasonable length of time.

Mr. BODE. We will do our best, sir.

[The following questions were not asked at the hearing but were submitted for response for the record:]

FOOD AND NUTRITION SERVICE

QUESTIONS SUBMITTED BY SENATOR BURDICK

SPECIAL SUPPLEMENTAL FOOD PROGRAM (WIC)

Question: Congress approved an increase of almost $139,000,000 for the WIC Program in the 1988 Appropriation Act. Has this funding been allocated to the States?

Answer: Yes, the Fiscal Year 1988 appropriation for the WIC Program has been allocated to the State agencies.

Question: What do you expect the increase in the average participants per month to be as a result of this funding increase?

Answer: After accounting for inflation, we estimate that approximately 144,000 new participants will be served each month as a result of the funding increase.

Question: Toward what priorities are new resources being targeted?

Answer: The WIC Program regulations establish a nutritional risk priority system. Persons in priority risk categories I-III are considered to be at greatest nutritional risk, and it is toward this group of persons that resources are directed. The WIC participants who comprise these top priorities include pregnant and breastfeeding women, infants, and children at nutritional risk due to physical or medical conditions, and also infants who are born to mothers who were either WIC participants during their pregnancies or otherwise were at nutritional risk during their pregnancies. An important way in which new resources are being targeted to these top priorities is through the use of new food and administrative funding formulas which provide funding incentives for increased services to the highest risk categories.

Question: Are nutritionally at risk toddlers being removed from the program to make room for infants?

Answer: Under the priority system established by WIC Program regulations, an infant with a nutritionally-related medical condition would be placed on the program before an older child with a similar nutritionally-related condition. However, the priority system is used to fill vacancies which occur after an agency has reached its maximum participation level. Until an agency reaches its maximum participation level, infants, children and women have equal access to program services. To our knowledge, toddlers are not being removed from the program in favor of infants.

Question: According to changes in the program proposed in the budget, what would be the cost of inflationary adjustments for infant formula and food items? What would be the cost of other aspects of the program, such as administration?

Answer: We do not provide separate inflationary adjustments for infant formula and other food items or other program aspects such as administration. Instead, we base inflation for the program on the

Thrifty Food Plan Index. The budget requests an increase of about $74 million for WIC based on a 4.1 percent increase estimated for the Thrifty Food Plan. Historically, actual WIC food package cost increases have closely mirrored the Thrifty Food Plan index.

Question: What amount of funds would remain available to serve new caseload? How many additional participants per month could be supported with these funds?

Answer: Given our Fiscal Year 1988 appropriation level of $1.8 billion, the amount of funds available to serve new participants after the inflation adjustment is about $73.5 million. Based on the Fiscal Year 1988 estimated cost per person of $41.98, a monthly average of approximately 144,000 new participants could be served.

Question: When was program research increased to $3,000,000, the maximum authorized?

Answer: The research budget request for the WIC Program was increased to $3,000,000 for Fiscal Year 1989. The increased funding was requested to meet the needs of research required by Congress. Full funding in the research account will allow us to proceed with the study of the effects of WIC on children, the biennial requirement for the participant characteristics survey in the WIC Program, and the cost-benefit analysis of the WIC and Medicaid programs.

Question: If it is true that this increase was provided to enable the Food and Nutrition Service to meet Congressional directives, why are Congressional directives not being met?

Answer: We are currently working to meet all Congressional directives. There are three major studies mandated by Congress: the update on the WIC Program and Participant Characteristics Surveys, the WIC/Medicaid Cost-Benefit Study, and the Study of the Appropriateness of Funding Levels for Administrative Services in WIC. Though not a Congressionally mandated study, members of Congress have also expressed interest in a study of WIC's impacts on infants and children.

The WIC Program and Participant Characteristics Survey for 1988 is currently in the data collection phase and a final report will be to Congress by the end of Fiscal Year 1989. Planning is underway for the next set of surveys in 1990.

We expect to award a contract to conduct the WIC/Medicaid Cost-Benefit Study. This award will occur this fiscal year so that the study can be completed by February 1990.

The Study of Administrative Services in WIC is underway, and we expect to meet the March 1989 deadline.

In regard to WIC's impacts on infants and children, FNS awarded a cooperative agreement to the University of North Carolina at Chapel Hill in March 1988. UNC will conduct a feasibility and research design study of this issue. The current schedule calls for a report from them in the fall of 1988.

Question: Does FNS continue to contract for studies of smoking and its effects on pregnant WIC participants? At what level of funds? Do such studies contribute to improving the administration of the program or help in assessing the benefits of the WIC Program?

Answer: FNS is participating in two studies of smoking cessation for pregnant women. Smoking during pregnancy is widely accepted as a nutritional risk factor, and is known to decrease birthweight. WIC strives to promote adequate prenatal weight gain, while smoking depresses appetite and depresses prenatal weight gain. In keeping with the legislative objective of serving as an adjunct to good health care, it is appropriate for the WIC Program to work with the prenatal care system to help reduce the level of nutritional risk imposed by smoking during pregnancy. Accordingly, we are contributing about 20 percent of the funding for the Centers for Disease Control's Smoking Cessation In Pregnancy (SCIP) project. This project is developing and evaluating interventions targeted towards the prenatal clinic population. Our contribution will enable WIC to provide reinforcement consistent with the primary intervention provided in the prenatal clinic. It will also allow CDC to assist in adapting the interventions for use with WIC prenatal clients who receive prenatal care from private physicians. A smaller project in Wayne County, Michigan is exploring alternative smoking cessation interventions for the WIC population.

We do not have plans for additional studies of smoking cessation for the WIC population. The total contribution to the CDC SCIP project has been $600,000 over three years. The Wayne County project cost $315,430 from Fiscal Year 1986 funds.

COMBINING WIC AND CSFP

Question: The 1989 budget request includes a proposal to combine the Commodity Supplemental Food Program and WIC, placing priority on applicants who are pregnant mothers, infants or children.

Mr. Bode, you are no doubt aware of the interest in expansion of the Commodity Supplemental Food Program (CSFP) as evidenced by the increase in appropriations provided in 1988. Has any of the additional caseload been approved for senior participants in CSFP? What is the current level of senior participation in the CSFP Program?

Answer: Allocations for the Fiscal Year 1988 caseload cycle were issued January 15, 1988. At that time, the maximum caseload allowed under the Fiscal Year 1988 Continuing Resolution, 165,755 women, infants and children, and 80,000 elderly slots were made available to authorized Commodity Supplemental Food Program (CSFP) State agencies. This caseload cycle included authorization of six new CSFP State agencies. The caseload assigned to the new sites can only be used for women, infants and children. Women, infants and children remain the priority population for CSFP services.

As of January 1988, program report data indicates that the level of elderly participation is 80,630.

Question: If the WIC and CSFP Program were to be combined, what would happen to the caseload at those sites now serving senior citizens? Would the slots be converted to serve women and children or would waiting lists comprised of the elderly be filled?

Answer: The Special Supplemental Food Program for Women, Infants and Children (WIC) and the Commodity Supplemental Food Program (CSFP) would retain their separate identities. Under the joint appropriation for the two programs proposed by the Department, the Secretary would be required to reserve each year for allocation under the CSFP sufficient resources to maintain Fiscal Year 1988 participation levels of (1) the elderly and (2) women, infants and children. Thus, CSFP funding for the elderly would always be sufficient to maintain the level of elderly participation in Fiscal Year 1988 in future years.

Question: Where would these seniors turn for commodity assistance, particularly in light of the fact that the Temporary Emergency Food Assistance Program is short of commodities? Does the budget proposal include accommodations for increasing other elderly feeding programs--especially to provide in-home commodity assistance?

Answer: First, the average number of elderly persons served through the Commodity Supplemental Food Program (CSFP) has increased to 80,000 persons monthly. This level will be maintained through Fiscal Year 1989.

Second, the Food and Nutrition Service operates several programs that provide nutrition benefits specifically for elderly households in addition to the Food Stamp Program, the cornerstone of FNS' nutrition assistance efforts. The Nutrition Program for the Elderly (NPE) provides commodities and cash reimbursements for meals served to elderly persons in congregate settings or delivered to their homes. Meals served in NPE are up about 3 percent this year from the same period last year. Most of the program growth is occurring in the home delivered meals portion of the program. In addition, despite the shortage of dairy commodities, FNS is making unlimited amounts of bonus cheese available to States or certain sites which accept 20 percent or more of their meal reimbursement in commodities.

Elderly households which meet the income and asset limitations are also eligible to receive food stamps. Our April 1987 study of the Temporary Emergency Food Assistance Program indicated that many of the elderly households could be eligible but are not currently receiving food stamps. The Food Stamp Program is the most efficient means to provide in-home food assistance to elderly households.

FOOD STAMP PROGRAM

Question: The Food Stamp Program budget proposes only three areas in which a reduction of funds is anticipated: $162,000,000 from collections for State error liabilities; $39,627,000 by eliminating EFNEP; and $29,200,000 in reduced benefit costs. These decreases can be contrasted to the significant increases proposed for administration and other program costs associated with the program.

While I can understand the inclusion of $17,828,000 for the Employment and Training Program mandated by Congress, I am puzzled by the $54,197,000 in other increased costs -- especially when benefit costs will be reduced.

Would you please explain for me upon what assumptions these increases are based? Also, please justify these increases in light of the decrease in benefit costs.

Answer: Overall benefit costs are expected to decrease because of continued improvement in the economic situation and a consequent decrease in unemployment. Monthly benefits per person are projected to rise as required by law. Relatively small variations in participation do not materially affect States' administrative costs.

The increase of $54,197,000 is made up of $42,271,000 needed to fund State Administrative costs for the fiscal year and $11,926,000 for other program costs.

The increase for State administrative costs reflects the application of a projected rate of inflation of 4.1 percent to the Fiscal Year 1988 base level costs of $1,030,984,000.

This increase for Other Program Costs is the result of the moderate rate of inflation projected between 1988 and 1989 of 3.9 percent and a one-time program investment of $10 million for the modernization of the coupon redemption system.

Question: How can administrative and other program costs under the Food Stamp Program be kept at a constant rate so that the major emphasis of the program can be in providing benefits to the needy?

Answer: We share your interest in restraining the growth of administrative costs. It is important to recognize, however, that administrative costs (including anti-fraud activities and other program costs) account for only 9 percent of total projected Food Stamp Program costs for Fiscal Year 1989.

Some of the growth in recent years reflects the cost of program improvements such as the significantly expanded employment and training program and the development of automated eligibility determination systems. These and other initiatives indirectly support program participants by improving the quality of services provided.

Question: Has an assessment of the Employment and Training Program been conducted by FNS or any outside group to date? How is this Program rated in effectiveness?

Answer: Abt Associates Inc. is conducting a nationwide evaluation of the Employment and Training Program under contract from FNS. Twenty-four States and 12,000 food stamp work registrants are included in this evaluation.

This evaluation of the food stamp Employment and Training Program will:

- o Describe the Employment and Training Programs operated by the States;
- o Assess how the Employment and Training program is implemented;

- Measure changes in employment, earnings, and receipt of benefits as a result of participation in the Employment and Training Program; and
- Assess the cost and estimate the cost-effectiveness of the Employment and Training Program.

FOOD DISTRIBUTION PROGRAM ON INDIAN RESERVATIONS REGULATIONS

Question: On October 20, 1987, you published proposed regulations on the Food Distribution Program on Indian Reservations. These regulations were not published in response to any changes in legislation, but you said were proposed to "improve administration and operation" of the Program. I have some serious concerns about these regulations and their impact on the programs' recipients. What is the status of the new regulations that have been promulgated for the Food Distribution Program on Indian Reservations?

Answer: We have just completed the second of two 90-day comment periods on the proposed regulations. We will now be analyzing the comments received and determining what directions to take based on the comments that were submitted.

Question: Does USDA have any data or studies on the Food Distribution Program on Indian Reservations that would indicate a need for additional administrative requirements for control or accountability?

Answer: In proposing to change the regulations for the program, we relied on our own internal review of the Food Distribution Program on Indian Reservation regulations which have remained essentially unchanged since they were first published in 1979. Our review revealed many weaknesses and administrative omissions which were corrected with publication of the October 20, 1987 proposed rules.

As an example, there are no procedures for assessing or collecting claims against households that receive more commodities than they are entitled to receive. The proposed rules correct this omission by spelling out methods for handling household claims similar to the methods used in the Food Stamp Program.

Question: What are your justifications for proposing to delete provisions such as the outreach and bilingual requirements, the right to a same day application, a telephone or in-home interview, and delaying the application processing time? What do you think will be the consequences for those living in remote areas with little or no transportation?

Answer: Our overall justification for the types of changes you mention is to ease the burden of adminstration on the agencies operating the program. These agencies are largely Indian Tribal Organizations (ITOs) that must meet all the requirements of the regulations, many of which we believe are unnecessary or excessively burdensome. Specific justifications for each of the changes in the proposed regulations are detailed in the supplementary information section of the October 20, 1987 proposed regulations. However, it should be noted that applicants would still be able to file applications in person, through an authorized representative or through the mail, provisions are still made for bilingual speakers or interpreters, and provisions would still be made for applicants with no income to receive commodities within 2 days. We believe that the effect on households living in remote areas would be minimal, since these households' interaction with the program would not change in any significant way.

Question: Why are more stringent income verification procedures being proposed, including the reporting of any income change of over $100, when most persons living on Indian reservations meet the income eligibility guidelines and this program's benefits are based on household size not their exact income?

Answer: The income verification procedures proposed in the October 20, 1987, regulations are basically very similar to the current regulations. In both current regulations and in the proposed regulations, gross, non-exempt income must be verified. In regard to reporting income changes, both the current regulations and proposed regulations require reporting of changes in household composition. The current rule requires reporting income changes that would cause the household to be ineligible. The proposed rules make reporting income changes easier by simply requiring the household to report changes over $100. Under the current regulations, households must always calculate whether a change in income would change their eligibility for the program. This type of reporting does not encourage accuracy. Conversely, it is very easy for households to know if their income increases by $100, they should report this change to the certification office.

Question: It is our understanding that concerns have been expressed to USDA regarding due process, litigation and fairness of the proposed regulations for the Food Distribution Program. How would you respond to these concerns?

Answer: First, we developed the regulations over many months and in consultation with our legal staff. We believe the regulations are fair and deny no one due process under the law. However, the regulations are proposed, not final, and we will examine all the comments we have received, and we will reexamine important issues to make sure that our final rule is the best approach possible.

FOOD STAMP PROGRAM

Question: In 1987, the GAO released a study on simplification of the Food Stamp Program. I am aware that application procedures are lengthy and often extremely tedious for potential program participants. Sometimes these procedures may even deter participation, particularly among seniors or the disabled. How is FNS working with the States to streamline application procedures?

Answer: The part of the application process which is most often subject to change is the application form itself. The Food and Nutrition Service's Application for Food Stamps is currently six pages long and contains questions necessary to determine eligibility.

statements of rights and responsibilities, and information required by the Food Stamp Act and other laws. For example, we recently had to add two questions to the expedited service screening page to reflect provisions in the McKinney Homeless Assistance Act of 1987. Further, the Immigration and Control Act of 1986 contained provisions necessitating additions to the Application for Food Stamps.

Although our application is relatively short, some State agencies have developed longer, multi-program application forms. While these forms are not "streamlined", they do serve the purpose of allowing an individual to apply for several programs at one time and on one form. This is certainly advantageous to the applicant. FNS reviews the States' deviations from the FNS application to ensure that all necessary information is on the forms. We are careful, both when making changes to the FNS application, or when reviewing State agency requests for deviation from that form, to ensure that no unnecessary material is included on the application.

While not part of the current ongoing Program operations, the Simplified Application Projects which FNS plans to undertake in selected areas could simplify the application procedures by utilizing other programs' (AFDC, SSI and Medicaid) income and resource definitions.

Question: How is FNS working with States to promote shared resources, services and information with other public agencies?

Answer: FNS is involved in a joint Federal-State effort to increase the efficiency of the Food Stamp Program. The effort is based on program management initiatives supported by sharing information among State agencies. The FNS role is to coordinate the exchange of program management information and provide technical assistance. Information sharing is accomplished primarily through the following technical assistance efforts.

The State Exchange Project is based on the premise that State and local cooperating agencies can often best solve their problems by sharing in the expertise of other State and local agencies. State Exchange funding was first provided in 1983 to reimburse State agency officials for the costs of visiting another State agency with known expertise on a particular program subject. In Fiscal Year 1987, $163,000 in State Exchange funding was provided to support more than 150 exchanges.

State-to-State is a magazine that highlights successful initiatives by various State and county governments. Each article lists a resource person who can be contacted for additional information. The magazine is circulated to over 8,000 individuals in local welfare offices, State agencies, and cooperating organizations across the country.

The Catalog of Program Improvement Activities is a compendium of approximately 300 Food Stamp Program management improvement activities that are taking place in local, State, and Federal Governments. It is updated regularly, organized by subject, and is sent to State agencies, FNS local offices, and others upon request. The catalog contains 22 sections on subjects such as certification, issuance, and technical assistance training aids. Over 3,300 copies were distributed in Fiscal Year 1987.

Question: What suggestions has GAO made with respect to simplifying procedures? What steps has FNS taken?

Answer: GAO confirmed the need to balance the effect of simplification procedures against potential effects on program benefits for clients.

FNS is in the process of initiating the simplified application project authorized by the 1985 Food Security Act. Under this legislation the simplified application projects will operate in up to 5 States and 5 political subdivisions. The regulations supporting these projects are in the agency clearance process.

Question: The 1989 Budget notes that $10,000,000 is recommended for the Food Stamp Program's acquisition of equipment for coupon handling and destruction. How will this money be programmed?

Answer: Over the last two years, the Food and Nutrition Service (FNS) has undertaken a major effort to enhance the current system for processing food coupons through authorized retailers and the banking system. The redesigns under examination for the enhanced redemption and reconciliation system represent the assimilated knowledge and needs of the various participants (i.e., retailers, financial institutions, Federal Reserve Banks and FNS) involved in the system. The redesigns are based on concepts presented by the Transactions Processing Committee of the American Bankers Association, macro-level requirements and objectives presented in the FNS User Requirements document dated July 1987, and the conceptual designs presented by the Federal Reserve in an October 1987 report. FNS is planning to begin pilot testing design alternatives with the Federal Reserve in Fiscal Year 1988, with implementation of the selected system redesign planned for Fiscal Year 1989. The $10,000,000 will be used for a major systems upgrade at the FNS Minneapolis Computer Services Center and for the acquisition of equipment needed at the Federal Reserve to meet National implementation processing needs. The specific equipment needs at the Federal Reserve will be based on pilot test and evaluation results.

Question: Will FNS award these funds directly or will a transfer occur?

Answer: The Food and Nutrition Service (FNS) will directly award the funds for the Minneapolis Computer Center systems upgrade and transfer funds to the Federal Reserve for FNS' costs of necessary equipment acquisitions.

Question: What improvements are needed in automation for handling coupons?

Answer: The current system, while effectively meeting the primary goal of ensuring prompt reimbursement to retailers and financial institutions, does not generate sufficient management information to provide adequate accountability or control fraud and abuse. Food coupon deposits from retailers cannot be adequately reconciled to debits generated by the Federal Reserve to the food coupon Department of Treasury General Account. The current system is heavily paper-oriented, based on 25 year old technology, and lacks automated information management processes.

The redesigned system is intended to accomplish the following principal objectives: improve accountability, improve system functionality and efficiency, reduce paper processing and reduce the potential for unauthorized retailer redemptions and fraud. The system redesign must improve accountability by reconciling the flow of coupon transactions from acceptance at the retailer point of sale to coupon destruction and debiting to the Treasury account. The current system is based on outdated punchcard technology at FNS' Minneapolis Computer Services Center and awkward and time consuming manual processes throughout the redemption process. The system redesign must provide cost-effective automated reconciliation and maximum use of automated data transfer. There are currently approximately 25 million documents processed annually in the redemption and reconciliation process, along with 2.5 billion food coupons. The system redesign must reduce paper processing through the use of data input at the source, early truncation of documents in the process, and automated data transfer and record keeping. To improve the identification and tracking of unauthorized retailer or financial institution redemptions, the system redesign must improve the quality and timeliness of redemption data through improved data and system modernization at the Minneapolis Services Computer Center.

FOOD PROGRAM ADMINISTRATION

Question: The Budget proposes a reduction of 85 FTE's in 1989. Is this reduction directly related to management and automation efficiencies?

Answer: The planned reduction in the Food and Nutrition Service (FNS) staff in 1989 is possible through elimination of non-essential functions and transferring employees to higher priority work as attrition occurs. We have expanded automation capabilities and thereby increased efficiency in certain areas, but the automation process is not complete.

Question: At what grade/step ranking are the staff reductions to be made?

Answer: Currently, the Food and Nutrition Service (FNS) is evaluating each position vacated to determine the best staffing mix for accomplishing agency missions and meet our Fiscal Year 1988 staff year ceiling. Attrition occurs at all grade levels; however, the positions are not necessarily filled at those same grade levels. We anticipate that reductions will occur at various grade levels, but the average level during Fiscal Year 1989 will be in the higher steps of a grade 7.

NUTRITION PROGRAM FOR THE ELDERLY

Question: The Budget proposes an increase of $3,284,000 for the Nutrition Program for the Elderly in order to serve about six million more meals to seniors in 1989. About how many seniors are currently served under this program? How many new participants will this increase accommodate?

Answer: Since USDA reimburses on a per meal basis, that data is collected rather than the actual number of people consuming the meals. In 1988, we are expecting to serve 243 million meals. The additional $3.3 million requested in the 1989 Budget will allow us to serve an additional 6 million meals.

Question: Does FNS have any long-range plans for helping low-income seniors to meet their nutritional needs, particularly in light of limitations proposed in CSFP and TEFAP?

Answer: The Food Stamp Program is the primary defense against hunger and malnutrition for all Americans, including the elderly. As an entitlement, the Food Stamp Program will continue to meet the needs of the elderly population as the number of elderly persons in our country increases.

The Food Stamp Act contains many special eligibility and benefit provisions which promote participation by and provide greater assistance for households with elderly members. For example:

- Households with elderly and disabled members may be certified for the Food Stamp Program for one year.

- The Department permits elderly and disabled persons to apply for food stamps at local social security offices at the time they apply for supplemental security income (SSI) benefits.

- Elderly and disabled persons who have difficulty getting around can fill out the food stamps applications at home and can be interviewed by phone or at home. The certifying office can then issue stamps by mail.

- Elderly and disabled persons are allowed greater medical deductions and can qualify for the program with higher assets. Households with at least one person 60 years of age or older, may qualify with assets up to $3,000. All other households are allowed $2,000 in assets.

- The elderly are exempt from the Food Stamp Program work registration requirement.

Currently, of the over 7 million households participating in the Food Stamps Program, about one fifth have one or more elderly members.

The following FNS programs also provide food assistance for the elderly:

- We are proposing maintaining services for the elderly through CSFP at 1988 levels. CSFP will serve a caseload of 80,000 elderly persons per month.

- The National School Lunch Program is also able to provide assistance for the elderly. Local school food service authorities, at their option, may use facilities, equipment, and personnel subsidized with NSLP funds to support nonprofit nutrition programs for the elderly.

- In the Nutrition Program for the Elderly, we have budgeted for a three percent program growth from 243 million in 1988 to 249 million meals in 1989.
- We are clearing regulations to implement amendments from PL 100-237 that allow the adult day care centers to participate in the Child Care Food Program. The new law will allow reimbursement for meals served to impaired disabled adults of any age,--such as victims of Alzheimer's disease--and other persons 60 years of age or older.

USDA also sponsors surveys of the National Nutrition Monitoring System -- the Nationwide Food Consumption Survey and the Continuing Survey of Food Intakes by Individuals. These will gather data on the U.S. population, including the elderly. This will enable ongoing monitoring of the dietary intake of this growing population group.

CHILD NUTRITION COMMODITIES

Question: There is no increase in the appropriation request for Section 32 commodities. Why?

Answer: Funding from Section 32 provides the Child Nutrition Programs with foods purchased through the surplus removal activities of the Department. This represents only a part of the total commodity purchases made for this program. The balance is provided through the use of a direct appropriation which provides maximum flexibility in satisfying program needs. This additional need is satisfied by purchases of price support commodities or foods purchased on the open market. Thus, it is our policy to budget the increased program needs under the FNS commodity activity.

Question: What is the amount of carryover funds available for commodity procurement in 1989?

Answer: As of April 13, 1988, the Agricultural Marketing Service estimates that $157,574,154 in carryover funds will be available for use in Fiscal Year 1989.

SCHOOL LUNCH PROGRAM

Question: In December, 1987, the Committee was informed by letter that four school districts had submitted requests for compensation for losses suffered as a result of changes in procedures for providing bonus commodity assistance during the 1982-3 school year.

Have final determinations on the submitted claims been made? If so, what has been recommended? If not, when are they anticipated?

Answer: Five school districts have submitted claims for reimbursement for losses suffered as a result of methodological changes in USDA's Evaluation of Alternatives to Commodity Donation. Those districts are: Amarillo Independent S.D., Amarillo, Texas; Loudon County S.D., Loudon, Tennessee; Maine S.A.D. No. 6, Bar Mills, Maine; Monroe County S.D., Key West, Florida; and Portland Public Schools, Portland, Maine.

We are in the process of reviewing those claims and plan to make a final determination by the end of this month. We shall let you know promptly thereafter.

CHILD CARE FOOD PROGRAM

Question: According to the President's Budget, the number of Child Care Food Program meals served in 1989 will increase by 43,000,000 over the number served in 1988. What is the corresponding rate of participation projected for 1989?

Answer: We do not project an average daily participation in this program. Based on regression analysis of past performance, we do estimate meal service will increase by 43 million meals.

Question: For the record, would you please provide a breakdown of the participation rates for the various centers and homes under this program?

Answer: We do not project participation in the Child Care Food Program. We do project meal service and will provide that information for the record.

[The information follows:]

Child Care Food Program Meal Projections
Fiscal Year 1989
(millions)

Type of meal	Meals served
Centers 1/	
Lunches and suppers	
Paid	45.086
Reduced price	16.186
Free	106.490
Breakfasts	
Paid	28.545
Reduced price	10.847
Free	72.262
Supplements	
Paid	57.593
Reduced price	17.356
Free	94.261
Total, Centers	448.626

Homes	
Lunches and suppers	141.222
Breakfasts	82.443
Supplements	142.119
Total, Homes	365.785
Total, Centers and Homes	814.411

1/ Meals served in Centers includes 6.384 million elderly meals.

Question: The budget justification states "On the basis of available funds, there is an increase of $63,545,921." Does this mean prior year funds would be made available? Please explain.

Answer: Yes, we are projecting there will be carryover funds available in the Child Nutrition account and that some of those funds will be used to fund the Child Care Food Program.

Question: What is the CPI percentage adjustment for food away from home assumed in the budget? How does this compare to the increase in 1988?

Answer: The percentage adjustment in the CPIU (second quarter) food away from home for Fiscal Year 1988 was 4.67 percent while the percentage adjustment for Fiscal Year 1989 is estimated to be 5.08 percent.

SCHOOL BREAKFAST PROGRAM

Question: The 1989 budget proposal indicates that there will be an increase of $34,679,000 in the reimbursement for breakfasts served to school children. Particularly low income children will experience an increase in the availability of school breakfasts.

What is the number of breakfasts expected to be served based on the budget proposal? What is the reason for this increase?

Answer: The budget proposal is based on the projection that 649 million breakfasts will be served in Fiscal Year 1989. We attribute this to increases in both the number of schools choosing to make a school breakfast available and in the population eligible for the School Breakfast Program.

Question: What is the average number of children expected to be served in 1989?

Answer: We project an average daily participation of 3.93 million children.

Question: Based on what assumptions about reimbursement rates are these figures comprised?

Answer: The reimbursement rates are adjusted annually to reflect changes in the Consumer Price Index (CPI) for Food Away From Home. The current CPI projection includes an increase of slightly more than five percent.

Question: The Congressional Budget Office estimates budget authority for the School Breakfast Program at $519,000,000. Why is there a discrepancy in your totals?

Answer: The Food and Nutrition Service request for the School Breakfast Program is $514.5 million, about 1 percent less than the Congressional Budget Office (CBO) estimate. This slight difference is primarily due to CBO's assumption that 655 million meals will be served in Fiscal Year 1989 compared to the 649 million meals that we are projecting. The two estimates are not significantly different and we are certain that the FNS budget request will be sufficient to fully fund the School Breakfast Program in Fiscal Year 1989.

SCHOOL LUNCH PROGRAM

Question: The 1989 Budget proposes a net decrease of $4,323,000 in the appropriation for the School Lunch Program. Taking into account the carryover of funds from 1988, program costs are actually increasing by $193,352,000. Would you please explain why the funding for low-income lunches is expected to increase by about $152,000,000?

Answer: A need for increased funding for low-income lunches is based on two factors: growth in meal service, and inflation of per meal payment rates. Growth in meal service requires an additional $34 million while an increase between Fiscal Years 1988 and 1989 of 5.08 percent in the CPIU (second quarter) food away from home increased meal payment rates an additional $118 million.

Question: Please explain the rationale and assumptions used in the budget proposal.

Answer: The budget proposal assumes that the program will be continued at the current services level of operation. We have projected that the total number of lunches will increase due to increased school enrollment. Also, the reimbursement rates are projected to increase on July 1 to reflect slightly more than a five percent change in the Consumer Price Index for Food Away From Home.

Question: How many children will receive upper, lower, and low-income lunches in 1989?

Answer: I will submit that information for the record. Below is listed the estimated average daily participation in the School Lunch Program during Fiscal Year 1989.

[The information follows:]

Upper	12.7 million
Lower	1.6 million
Low	10.5 million

CHILD NUTRITION PROGRAMS
STATE ADMINISTRATIVE EXPENSES AND AUDIT EXPENSES

Question: The 1989 Budget proposes an increase of $4,122,000 for State Administrative Expenses associated with the School Lunch, School Breakfast, Child Care Food and Special Milk Programs. What are some of the uses of the administrative funding?

Answer: Child Nutrition State Administrative Expense (SAE) funds are used by State agencies primarily for salaries and fringe benefits. The SAE funds are also used for travel expenses for administrative and supervisory personnel, support services and general administrative costs (e.g., printing, office supplies, postage); office equipment; and monitoring and training.

Question: Do States use any of these funds for quality control measures or auditing of these programs?

Answer: Rules require States, at a minimum, to review one quarter of their school food authorities annually for administrative and fiscal integrity. The cost of these reviews comes out of States' State Administrative Expense (SAE) grants.

Question: For the record, please provide a breakdown of the funding by program.

Answer: For Fiscal Year 1988, the breakdown of funds for State Administrative Expenses by program is:

School Programs	$36.4 million
Child Care Food Program a/	15.2 million
Food Distribution Program	2.7 million
	$54.3 million

a/ Includes $1.8 million which accrues to programs administered by FNS.

Question: Another recommendation of the budget is to eliminate funds to States for audit expenses associated with the Child Care Food Program. I am personally very concerned about this issue, because with so many diverse arrangements for child care, this could be a difficult chore for States to manage single-handedly and still assure the integrity of the food programs.

If funds for the Child Care Food Program audits were appropriated, what would that amount be? (I understand this number is "up to" two percent of the prior year program costs.)

Answer: We have not recommended funding for Child Care Food Program Audits in Fiscal Year 1989. However, $9,689,000 would be necessary according to our funding formula.

Question: What is the amount of State Administrative Expenses provided to the States for the Child Care Food Program?

Answer: For Fiscal Year 1988, the amount of SAE funds allocated to State agencies for the Child Care Food Program was $13.4 million.

Question: Would it be feasible to allow States to use any of these funds to cover audit expenses or would there be a shortfall in other necessary services?

Answer: States may currently use SAE funds to cover special request audits of the Child Care Food Program (CCFP). With the implementation of the Single Audit Act of 1984, participants of the CCFP are currently audited under the organization-wide audit concept. Since the majority of SAE funds are currently used for oversight of the CCFP, we believe that adequate oversight funding is available.

SUMMER FOOD SERVICE PROGRAM

Question: The Summer Food Service Program will cost an additional $10,175,000 over the 1988 appropriation, according to the President's Budget recommendation.

Approximately how many meals to how many children will be served in the summer of 1989 according to these estimates? What are the reasons for these increases?

Answer: We project that 84.5 million meals will be served. Program growth is resulting from more institutions making the summer program available and from statistical data showing increasing population in the income and age groups eligible to participate in the program.

Question: What is the expected increase in the cost of food for the program?

Answer: The projections for this program include an increase of $9.1 million for food costs. This results from an increase of about 5 percent in the Consumer Price Index, as well as an increase in the number of meals.

Question: The 1989 Budget presents the Puerto Rico Nutrition Assistance Program as a separate account and provides the authorized level of funding for the program. Please explain the Administration's rationale for its shift in position with respect to the presentation of its budget for Puerto Rico's NAP?

Answer: We continue to present the budget for the Puerto Rico Nutrition Assistance Program (NAP) as a separate account from the Food Stamp Program (FSP) as it has been done in the recent past. The reason behind this is due to the uniqueness of the program. NAP parallels the FSP in providing for those in need, but provides food assistance through cash grants versus coupons, and has replaced the FSP in Puerto Rico. NAP gives the commonwealth broad flexibility to establish a food assistance program specifically tailored to the needs of its low-income households.

ADULT DAY CARE CENTERS

Question: The 1988 Appropriations Bill included funding for including Adult Day Care Centers among those programs eligible to receive Child Nutrition Program commodities in the same manner as child care centers now participate. Have regulations for this program been promulgated?

Answer: Regulations have been drafted and are currently in clearance.

Question: When do you expect these regulations to be finalized?

Answer: FNS will publish interim implementing adult day care regulations shortly. They will be effective upon publication. After considering comments received on these regulations, FNS will then publish final regulations.

Question: How many adult day care homes and centers do you anticipate will take part in this program in 1988? In 1989?

Answer: Based on information from the National Institute on Adult Daycare, established by the National Council on the Aging to facilitate adult day care communication and action, the Department assumes that approximately 1,400 adult day care centers will participate in the program in 1989. In 1988, the Department anticipates approximately half this level of participation, which assumes that either 700 centers, or half of the participants in the full 1,400 centers will participate in the program.

Adult day care homes are not eligible to participate in the program, as the law implementing adult day care participation applied to adult day care centers.

QUESTIONS SUBMITTED BY SENATOR SASSER

SPECIAL SUPPLEMENTAL FOOD PROGRAM (WIC)

Question: As I noted in my testimony, I am very concerned about the amount of individuals served by the WIC Program. We have seen outstanding results in Tennessee, yet we are still able to serve only about half of those eligible. This warns me that we have some serious problems. While there is an increase in WIC funding, $74 million is a modest increase when opposed with the needs. Does the Department have any other plans which would increase the number of recipients of WIC assistance?

Answer: The WIC Program maintains a strong and successful priority system which targets WIC benefits to those categories of participants most in need of nutritional supplementation. Nationwide, we serve almost 90 percent of infants and two-thirds of pregnant women whose family income is below 100 percent of poverty. The priority system is structured such that WIC benefits go to those at nutritional or medical risk, making WIC an effective program.

In addition, FNS has encouraged States, through cost-containment measures, to lower food costs and provide benefits to more participants. State initiative on alternative food delivery systems or manufacturer rebates should help to lower food package costs and make more resources available to participants.

Moreover, the proposal to merge the appropriation accounts for WIC and CSFP will allow States to shift resources between the two programs to serve more of the target population of women, infants and children. Previously, for example, States which have been unable to make full use of the CSFP caseload for women, infants and children, have switched this to CSFP elderly caseload. Merging the two appropriations would allow CSFP slots not used for women, infants and children, to be transferred to WIC where the funds could be used to serve more women, infants and children.

COMBINING WIC AND CSFP

Question: Could you elaborate on plans to merge the activities of WIC and the Commodity Supplemental Food Program? There is a great need in the country for both of these programs, and I would hope that this merger would not curtail the activities of either one.

Answer: In combining the accounts for the Supplemental Feeding Programs, our goal is to offer States the opportunity to provide important services to more women, infants and children. In previous years, States which have been unable to make full use of the CSFP caseload for women, infants and children have requested switching this to CSFP elderly caseload. For example, in 1987, 4,074 CSFP caseload slots for women, infants and children were converted to slots for the lower priority CSFP elderly. Our proposal would allow these resources to be transferred to WIC to provide services to the women, infants and children target group for whom these programs were originally intended and who could benefit most from participation. Alternatively, States may wish to transfer WIC funds to CSFP where women, infants and children can be served at a lower per participant cost. On average, twelve women, infants and children can be served in CSFP for about the cost of serving five in WIC.

In either case, States' plans for the transfer of funds between the two programs would only be approved if there would be an increase in the total number of women, infants and children receiving supplemental food program benefits.

QUESTIONS SUBMITTED BY SENATOR COCHRAN

SCHOOL FOOD SERVICE MANAGEMENT INSTITUTE

Question: Mr. Bode, as you know, the Continuing Resolution for 1988 appropriated $50,000 for a feasibility study on a school food service management institute to be located in the State of Mississippi. Can you give the Committee a progress report on the feasibility study? Who is going to do the feasibility study? What is your time line for reporting back to the Congress?

Answer: A Request for Proposals (RFP) is currently being developed. We will keep you informed of our progress.

BONUS COMMODITIES

Question: I received your letter dated April 8, 1988, outlining the availability of bonus commodities (copy provided for the record). What is the supply outlook at this time?

LETTER FROM JOHN W. BODE, ASSISTANT SECRETARY FOR FOOD AND CONSUMER SERVICES, DEPARTMENT OF AGRICULTURE

April 8, 1988

Honorable Thad Cochran
Ranking Minority Member
Subcommittee on Agriculture, Rural
  Development and Related Agencies
Committee on Appropriations
United States Senate
Washington, D.C. 20510

Dear Senator Cochran:

Over the last several months, we have kept you advised of the level of commodities available for distribution to various food assistance programs. Of course, commodity availability is dependent upon inventories of the Commodity Credit Corporation (CCC). Based on our latest review of CCC uncommitted inventories and projected acquisitions, we are now finalizing our commodity distribution plans for the 1988-1989 school year (July 1 - June 30).

This review indicates that considerably less cheese will be available for use in domestic food assistance programs. Also, inventory levels of rice, honey and nonfat dry milk have declined significantly.

Our current plans for allocating free (bonus) commodities among the domestic food assistance programs for the 1988-1989 school year are explained below.

1. Wheat flour, nonfat dry milk and butter will be available for all programs on the same basis as the 1987-1988 school year. Cornmeal will also be available as a bonus item to all programs.
2. At this time, approximately one-third of the 1987-1988 utilization level of honey will be offered to schools and charitable institutions. We anticipate additional amounts of honey being offered as the year progresses.
3. Rice will not be available as a bonus commodity in any program.
4. For schools, we expect to supply about 80 percent of last year's cheese usage level. The types of cheese available will be cheddar and process American. Also, because of the timing of acquisition, we expect to have difficulty accommodating requests for cheese during part of the school year. In order to allocate the available supply of cheese equitably among States, we will use the number of meals served in school year 1987-1988 rather than past usage as the basis for allocation.
5. Charitable institutions will be offered the same amount of cheddar and process American cheese as this year, allocated based on meal service to their needy clientele. As with schools, availability will not always match ordering patterns.
6. Summer Food Service Programs and summer camps will be offered cheese (and other bonus items) on the same basis as last year.
7. Child Care Food Programs and the Nutrition Program for the Elderly will receive bonus cheese (and other bonus items)

only to the extent that they take at least 20 percent of their entitlement in commodities.

8. The Food Distribution Program on Indian Reservations will continue to receive cheese as part of the regular food package.

9. Bonus cheese and honey will not be available for the Commodity Supplemental Food Program since they are not part of the regular food package.

10. Bonus cheese and honey are not expected to be available for National Commodity Processing (NCP). Since quantities are insufficient even to accommodate all school requests through the State, it is inappropriate to continue those donations for NCP. As noted above, wheat flour, butter, nonfat dry milk and cornmeal will be available for NCP.

As always, commodity supply estimates are subject to change. These plans can readily accommodate modest changes in the supply situation. Should a change in supply warrant a significant modification in our distribution plans, we will promptly inform you.

We are now reviewing these plans with the expectation of announcing our bonus commodity distribution plans in one week. If you have any questions, please contact me or Frank Ippolito, Acting Director, Office of Governmental Affairs, Food and Nutrition Service, at 756-3010.

Sincerely,

J.W. Bode

JOHN W. BODE
Assistant Secretary for
Food and Consumer Services

Answer: Supplies of butter will be adequate to provide it as a bonus item to all outlets for the year. With respect to the availability of cheese and nonfat dry milk, it will be contingent upon acquisitions of CCC stocks over the next several months, that is, the dairy flush season. Flour will be available as a bonus item to eligible outlets on the same basis as last year. Prospects for available CCC stocks of rice and honey are very bleak. Additional details of the supply outlook are contained in my letter of April 18 which I will furnish for the record.

[The information follows:]

LETTER FROM JOHN W. BODE, ASSISTANT SECRETARY FOR FOOD AND CONSUMER SERVICES, DEPARTMENT OF AGRICULTURE

April 18, 1988

Honorable Quentin N. Burdick
Chairman, Subcommittee on Agriculture, Rural
Development, and Related Agencies
Committee on Appropriations
United States Senate
Washington, D.C. 20510

Dear Mr. Chairman:

On April 8, 1988, we advised you that we were developing plans for providing bonus (free) commodities to the schools and other domestic food assistance outlets for the upcoming year. After considering the views of various interested parties and reviewing our options, we have decided on the distribution policies listed below.

The policies articulated in Items 1-3 and 5-10 are identical to those in our April 8 letter with a few clarifying additions. Item 4 contains a change regarding allocation procedures among States. Finally, in response to industry and State comments, the policy articulated in Item 10 and a new Item 11 regarding National Commodity Processing (NCP) take a somewhat different approach from our previous one.

1. Wheat flour, nonfat dry milk and butter will be available for all programs on the same basis as the 1987-1988 school year. Cornmeal will also be available as a new bonus item to all programs.

2. At this time, approximately one-third of the 1987-1988 utilization level of honey will be offered to schools and charitable institutions. We anticipate additional amounts of honey being offered as the year progresses.

3. Rice will not be available as a bonus commodity in any program. However, we plan to make it available as an entitlement item to schools and other outlets. It will also continue to be a part of the Commodity Supplemental Food Program (CSFP) package.

4. For schools, we expect to supply about 80 percent of this year's cheese usage level. The types of cheese available will be cheddar and process American. Due to the timing of acquisitions, we expect difficulty in accommodating requests for cheese during part of the school year. In order to allocate the available supply of cheese equitably among States, we shall use the number of meals served in School Year 1987-1988. However, no State will receive more than it was allocated this year. Mozzarella will not be available as a bonus cheese commodity. We expect to make mozzarella available as an entitlement item.

5. Charitable institutions will be offered the same amount of cheddar and process American cheese as 1987-1988, allocated based on meals served to their needy clientele. As with schools, availability will not always match ordering patterns. Mozzarella will not be available.

6. Summer Food Service Programs and summer camps will be offered cheese (and other bonus items) on the same basis as 1987-1988.

7. Child Care Food Programs and the Nutrition Programs for the Elderly will receive bonus cheese (and other bonus items) only to the extent that they take at least 20 percent of their entitlement in commodities.

8. The Food Distribution Program on Indian Reservations will continue to receive cheese as part of the regular food package.

9. Bonus cheese and honey will not be available for CSFP since they are not part of the program's food package.

10. Bonus cheese and honey will not be available for NCP. Since quantities are insufficient to accommodate all school requests through the State, it is inappropriate to continue those donations for NCP. However, it is possible that more cheese and honey may be acquired during the year than is currently projected. In order to facilitate the effective use of those products should an adequate supply become available, the Food and Nutrition Service (FNS) is willing to sign NCP agreements with eligible cheese or honey processors. These agreements can be activated immediately. As noted above, wheat flour, nonfat dry milk, butter and cornmeal will be available for NCP.

11. Several NCP processors and State officials have suggested that States be allowed to assign a portion of their cheese to NCP processors as a means of continuing to make cheese available through the national processing program. FNS has examined that approach and encountered several legal and administrative obstacles. In the time available to finalize our bonus policy, we were unable to resolve all problems. Therefore, we shall expeditiously consult with interested parties to determine the feasibility of allowing States this option.

As always, commodity supply estimates are subject to change. These policies can readily accommodate modest changes in the supply situation. Should a change in acquisition levels warrant a significant modification in our distribution plans, we shall promptly inform you.

Sincerely,

/s/

JOHN W. BODE
Assistant Secretary for
Food and Consumer Services

Question: With regard to the schools, I certainly would not want to supply less than 80 percent of last year's cheese usage. Was that a conservative number, or an optimistic number?

Answer: We believe that 80 percent of this year's cheese usage level expected to be available to schools for next year is somewhat conservative. Milk supplies seem to be increasing relative to a year ago. Comparisons of CCC acquisitions of cheese from last year to this year at the same period show an increase.

Question: What is the outlook for TEFAP?

Answer: Temporary Emergency Food Assistance Program commodities that will be available on a quarterly basis will be allocated at the same quantities as last year, e.g., flour, cornmeal and butter. Nonfat dry milk will be allocated on a monthly basis if supplies are adequate. The milk will be available through July 1988 at the same monthly rate as last year. Cheese, rice and honey will not be available in the foreseeable future.

NATIONAL COMMODITY PROCESSING PROGRAM

Question: On a related matter, you noted in your letter that schools would not be allowed to use the national commodity processing program for cheese. I understand your reasoning, but I am concerned about what will happen to schools located in States that do not allow or provide for processing agreements.

How will you handle this matter? Can't the Department, in light of the new commodity distribution bill signed by the President in January, make State processing contracts a part of their performance standards?

Answer: Proposed State agency performance standards were developed in 1987. The standards were developed as a means for State distributing agencies to measure the level of service they offer to local school food authorities and other recipient agencies and to make improvements where necessary.

Section 3(e)(1)(B) of Pub. L. 100-237 requires the Secretary to provide minimum performance standards to be followed by State agencies responsible for intrastate distribution of donated commodities and products. The Department is not requiring that State agencies must administer a processing program. The decision to administer a State processing program must rest with the State distributing agency. Factors such as workload implications and expertise in dealing with complex processing issues must be taken into consideration. We are proposing, however, that if State agencies make the decision to administer a processing program, that they do so in accordance with the Part 250 regulations and that it be responsive to the needs and requests of the recipient agencies.

Question: As you will appreciate, receiving less bonus commodities will put pressure on schools to increase the cost of a school lunch, and without the national commodity processing program, it will make it more difficult for schools to utilize those commodities they do receive. Can you comment on this?

Answer: Schools will receive at least 80 percent of their last year's cheese usage level and about one-third of their honey usage level. However, this reduced level of bonus products is not likely to cause increased prices for reimbursable meals. Bonus commodities are used in all aspects of the school food service including a la carte products. If they choose, school districts could limit price increases to a la carte items. We should note, however, that bonus items are never guaranteed to schools as are entitlement commodities. No school food authority should be dependent on bonus commodities as a central element of its school food service operations. That is why we are providing ample notice to schools so they can plan for next year.

The National Commodity Processing (NCP) Program will continue to operate during the 1988-89 program year. Cheese and honey will not be available for processing. However, cornmeal will be added to the list of available commodities. Should cheese or honey become available in adequate quantities, they will be included in NCP. Those schools wishing to continue purchasing processed products containing commodity cheese and honey will still be able to receive these products through the State processing programs.

FOOD STAMP PROGRAM -- QUALITY CONTROL SYSTEM

Question: Last year's Conference Report/Statement of the Managers contained language calling for reform and new regulations on the method for determining State error rates and associated liability. What is the status of these regulations?

Answer: The studies conducted by the National Academy of Sciences and by the Department's Food and Nutrition Service did not contain recommendations that the Department can adopt by publishing regulations. We want to consider the reviews that have been conducted and have been developing a report and hope to have it before Congress shortly.

Question: Many States have had problems achieving goals by certain time frames set by FNS. No "grace periods" for implementation of policy changes were allowed. Will the new regulations allow for "grace periods" similar to those given in the AFDC program?

Answer: The regulations usually provide 30 to 60 days advance notice and often permit implementation in steps. In some instances the policy must be implemented for all new cases processed after the implementation date, but State agencies are not required to apply the new policy to participating households until another action is taken on the case. In the event that there is shorter advance notice, FNS has allowed a brief grace period for quality control purposes.

In regard to regulations that have retroactive implementation dates, recent rules have provided that QC reviewers shall not identify variances resulting solely because of the implementation or nonimplementation of a rule for cases reviewed during the retroactive period.

In general, there is no direct evidence that quality control errors increase as the result of incorrect implementation of new or revised policy. Many policy changes are clear or do not significantly affect program operations, and those that do may not necessarily result in increased errors. In the event that a Food Stamp Program change has a substantial impact upon a particular State agency's management of the program, there is provision in the regulations for waiving the State agency's quality control liability for good cause.

Question: Will any allowance be given for client-caused errors?

Answer: Since the distinction between agency-and client-caused errors is ambiguous, and the QC system under current law encourages the reduction of all types of errors, there are no plans to make allowances for client-caused errors.

State agencies have at times argued that errors caused by client action or inaction should not be incorporated into the error rate that serves as the basis for fiscal liabilities. This argument is based on the view that client errors are beyond the agency's control. This issue is important because the types of errors counted and not counted in the error rate can affect the direction and intensity of State efforts to reduce the incidence of errors.

The distinction between client and agency errors is not always clear and unambiguous. For example, when clients fail to report income, it may be that case workers have not adequately explained the reporting requirements to clients. Second, the client's responsibility to report information must be balanced against the agency's responsibility to follow up on questionable, incomplete, or inconsistent information provided by clients. For example, if a 70 year old male applicant reports no Social Security income, and a QC reviewer later detects the unreported income, both parties were at fault. Determining the responsible party is difficult. Errors classified as client errors by one reviewer, or in one State, can often justifiably be classified as agency errors by another, and vice versa.

Client errors, moreover, are not entirely beyond the control of State agencies. Agencies can and do take a variety of steps to prevent client errors, and generally try to structure the interaction between clients and staff in such a way as to reduce client error. These measures include such steps as improving interviewing methods, strengthening verification procedures, and conducting computer file matches.

SCHOOL LUNCH ELIGIBILITY

Question: Free lunch eligibility is tied to food stamp income guidelines. The annual update has been changed from July 1 to October 1 of each year. I understand that this will cause administrative complications for the schools. What is FNS' position on this matter?

Answer: Since July 1 of 1983, the income eligibility guidelines for free school lunches have been tied to the annual food stamp eligibility guidelines which have been adjusted effective on July 1 of each year. Public Law 100-77 changed this annual implementation date of the revised guidelines to October 1. Implementing the free meal guidelines on October 1 rather than July 1 will require school officials to compute the free meal eligibility for some children twice--at the beginning of the school year and again in October. Further, since the connection to food stamp eligibility applies only to free lunches, reduced price eligibility guidelines will be effective on July 1. This will add to the confusion and paperwork burden. Therefore, FNS supports legislation which would provide for a July 1 implementation date for free meal guidelines.

DIETARY GUIDELINES FOR CHILDREN

Question: The Dietary Guidelines are an excellent nutritional guide for the general population, but they do not contain recommendations for children. Has FNS or HNIS given any consideration or thought to how to apply the Guidelines to children?

Answer: FNS continues to promote the Dietary Guidelines as an educational tool in the school-based Child Nutrition Programs. FNS has incorporated the Dietary Guidelines into two technical assistance program aids which are provided to all schools participating in the National School Lunch Program. These aids are:

- Menu Planning Guide

  "Appendix III of the Menu Planning Guide for School Food Service," PA-1260, has been provided to every school food service manager in the National School Lunch Program. This material presents recommendations to limit the amount of sugar, fat and salt in school meals to a moderate level.

- Revised Recipe File

  USDA has just completed revision of its school lunch recipe file which will be distributed to States by late summer. The contractor for the project was required to take into account several fundamental considerations in developing the new school lunch recipes, one of which was to make moderate use of added sugar, fat and salt.

  While sugar, fat and salt levels were certainly important, their levels obviously had to be balanced with the many other constraints inherent in quantity food production systems and, in particular, to the uniqueness of school feeding programs and their regulated meal patterns. No arbitrary target levels of any one ingredient was specified in the recipes. In general, however, the amounts of sugar, fat and salt are reduced from the amounts of the previous 1971 USDA school lunch recipes.

HNIS believes that "Nutrition and Your Health, Dietary Guidelines for Americans" applies to healthy Americans of all ages. The Dietary Guidelines do not apply to people who need special diets because of diseases or conditions that interfere with normal nutrition. Infants and toddlers not yet eating the usual food available to Americans are also considered to be on special diets.

The seven Dietary Guidelines apply equally well to people of all ages who are not on these types of special diets because they are qualitative and directional rather than quantitative and specific. For example, the first two Guidelines -- "Eat a variety of Foods" and "Maintain Desirable Weight" form the framework for a good diet. All Americans should eat a variety of foods to meet their nutrient needs. And the quantity of food eaten should be sufficient to provide for energy needs while allowing the individual to maintain desirable weight. Obviously, the quantities of food eaten should differ depending on the individual's caloric needs. All individuals need energy from food to maintain bodily functions and to cover energy expended in exercise. Children need additional energy for growth and development. The next five Guidelines list special characteristics of a good diet and they apply equally well to all healthy Americans. They recommend eating foods with adequate starch and fiber, avoiding too much fat, saturated fat, cholesterol, sugar, sodium and alcoholic beverages. The recommendation concerning the use of alcoholic beverages is unnecessary for children and for many Americans who do not consume alcoholic beverages. Therefore, the recommendation is worded "if you drink alcoholic beverages, do so in moderation."

QUESTIONS SUBMITTED BY SENATOR KASTEN

COMMODITIES FOR THE NEEDY

Question: Mr. Bode, if you had $500 million to spend on commodities to distribute to the needy, how do you believe that the money could best be used (i.e. what commodities would do the most good)?

I feel strongly that we need to distribute the commodities that will do the most good, rather than spend the scarce resources piecemeal to appease various constituencies. In my view, the most effective use of any extra money we decide to appropriate for TEFAP would be to buy cheese. Do you agree with this from a nutritional standpoint?

Answer: We don't believe that buying commodities to distribute them to households is a wise policy. It makes sense to distribute commodities that have already been acquired and are sitting in warehouses; it does not make sense to buy commodities just to give them away. We moved away from direct distribution to the Food Stamp Program a number of years ago. To move backwards would be a mistake.

We cannot expect any one food item or even several items to fully complement the foods already available from other sources for Temporary Emergency Food Assistance Program recipients. This is why we prefer providing benefits in the form of food stamps which allow recipients to choose the foods they need.

Cheese is an acceptable emergency food supplement provided that a variety of other foods is also available. The "Dietary Guidelines for Americans" stress the importance of eating a variety of foods daily to obtain the more than 40 different nutrients needed for good health. In addition to foods made from milk such as cheese, daily food selections should include:

- fruits;
- vegetables;
- breads, cereals and other grain products; and
- meats, poultry, fish, eggs, and dry beans and peas.

The Food Stamp Program provides the low income population with access to the variety of foods needed to provide a nutritious diet.

REDUCTION IN DISCRETIONARY SPENDING

Question: The Senate Budget Committee proposes to pay for the additional $500 million in nutrition assistance by reducing USDA discretionary spending by 6-1/2 percent. What impact would this have on the Food and Nutrition Service? On the Human Nutrition Information Service?

Answer: This proposal would not have an impact on the Food and Nutrition Service since the proposed reduction would come in budget function 300 (Agriculture discretionary). The food assistance programs are funded through function 600.

A reduction of 6-1/2 percent in the budget for the Human Nutrition Information Service would total over $600,000. This would result in a reduction of approximately 75 percent of our planned analyses of the Nationwide Food Consumption Survey.

TEMPORARY EMERGENCY FOOD ASSISTANCE PROGRAM

Question: States set their own standards of eligibility for the Temporary Emergency Food Assistance Program. What are they, on a state by state basis? How effective are the States' standards at targeting TEFAP assistance to the needy?

Answer: Under the Temporary Emergency Food Assistance Program, States are required to establish eligibility criteria which are based on household income. In order to accomplish this, each State uses the Federal poverty income guidelines (which equal 100 percent of poverty) as a starting point on which to base the eligibility criteria. Each State then increases this base amount to best target persons in need of food assistance within the State. Additionally, to facilitate the eligibility process, most States have determined that persons participating in certain Federal programs are automatically eligible to receive surplus foods. The programs most frequently selected by States are the Food Stamp Program, Aid to Families With Dependent Children, Supplemental Security Income and Medicaid. Giving each State the flexibility to design the overall organization and administration of its program has been very effective in identifying and serving the needy population within each State. We have prepared a summary of the eligibility guidelines selected by each State and grouped according to the Food and Nutrition Service Regional Office serving the State.

[The information follows:]

Northeast Region

Connecticut - 150%; 175% for elderly handicapped
Maine - 150%

Massachusetts - 150%
New Hampshire - 150%
New York - 150%
Rhode Island - No percentage given. Eligibility is based on participation in specific programs.
Vermont - 125%

Mid-Atlantic Region

Delaware - 185%
District of Columbia - 130%
Maryland - 150%
New Jersey - 185%
Pennsylvania - 150%
Puerto Rico - No percentage given. Recipients of public assistance, residents of subsidized public housing or persons living in specific geographical areas are eligible.
Virginia - 130%
Virgin Islands- 185% (1984 is used as a data base)
West Virginia - 185% (1984 is used as a data base)

Southeast Region

Alabama - 130%
Florida - 130%
Georgia - 130%
Kentucky - 130%
Mississippi - 130%
North Carolina- 130%
South Carolina- 130%
Tennessee - 130%

Midwest Region

Illinois - 125%
Indiana - 150%; 180% for persons over 60 years of age
Michigan - 130%; 160% for persons over 60 years of age
Minnesota - 185%
Ohio - 150%
Wisconsin - 150%

Southwest Region

Arkansas - 130%
Louisiana - 130%
New Mexico - 130%
Oklahoma - 130%
Texas - 130%; 165% for persons over 65 years of age

Mountain Plains Region

Colorado - 185%
Iowa - 185%
Kansas - 165%
Missouri - 125%; 150% for disabled persons and persons over 60 years of age

Montana - 150%
Nebraska - 150%
North Dakota - 150%
South Dakota - 185%
Utah - 185%
Wyoming - 130%

Western Region

Alaska - no program
American Samoa - no program
Arizona - 150%
California - 150%
Guam - 130%
Hawaii - 150% of Hawaii poverty guidelines
Idaho - 130%
Nevada - 150%
Oregon - 130%
Washington - 150%

Question: In the past, USDA has provided $50 million to help states administer the Temporary Emergency Food Assistance Program. How much of the cost of administering this program has been borne, respectively, by USDA, the State governments, and private organizations?

Answer: USDA examined Federal and State-level administrative costs in the April 1987 report to Congress. USDA pays the cost of shipping commodities to State-selected sites. This cost is included in the cost of the commodities, which totaled $846 million in Fiscal Year 1987. As you noted, USDA provides an additional $50 million to pay State and local administrative costs.

USDA obtained information on intra-State distribution costs by surveying State distribution agencies, emergency feeding organizations and distribution sites. Based on that information, we estimate that it costs about $120 million annually to distribute Temporary Emergency Food Assistance Program commodities at the State level. This figure includes direct out-of-pocket expenditures, such as fees paid for storage and transportation, as well as the value of voluntary labor and contributions of materials, storage space and other services.

States reported costs of $25 million. This includes some activities that could have been classified as local costs, but were classified as State-level because the State paid the charges. States retained $22 million in Federal funds to cover their costs. This means that the net contribution at the State level was only $3 million nationwide.

Of the roughly $95 million in distribution expenses at the local level, $70 million was the value of donated labor. In general, the heavy reliance on donated labor and other services kept distribution site out-of-pocket costs to a minimum. Approximately $26 million in Federal administrative funds were distributed to local agencies.

Question: Assuming that Congress reauthorizes the Temporary Emergency Food Assistance Program this year, what level of additional Federal outlays (i.e. appropriations) would be necessary to sustain the Temporary Emergency Food Assistance Program Donations at the level of the last few years?

Answer: Recent decreases in the inventories of cheese, nonfat dry milk, rice and honey have caused USDA to suspend distribution of these commodities for parts of Fiscal Year 1988 and it is uncertain if they will be distributed at all in Fiscal Year 1989. At current acquisition prices, USDA would have to spend over $700 million to obtain sufficient quantities to distribute these commodities at Fiscal Year 1987 levels. This is a very conservative estimate of the cost because USDA would have to spend much more than the support price to obtain the commodities under the current tight market conditions.

Buying commodities for household distribution goes beyond the issue of cost, however. It's one thing to give away commodities that are already sitting in warehouses, but quite another to go out and buy it just to give it away. We, as a nation, abandoned direct food distribution to needy households in favor of the food stamp program many years ago. Going out and buying food to give away to households is a step backwards.

Buying commodities for the Temporary Emergency Food Assistance Program also means that there will be fewer commodities for other USDA programs like the school lunch program and distributions to charitable institutions. In effect, the government will be bidding against itself for the small amount of cheese and other commodities that is in excess of commercial demand. It will not make more cheese available in the short run, it will merely drive up the price and bid some away from commercial markets. This is not sensible agricultural policy.

QUESTIONS SUBMITTED BY SENATOR SPECTER

FOOD ASSISTANCE PROGRAMS BENEFITING THE ELDERLY

Question: Recent reports indicate that over 292,000 elderly households in Pennsylvania are classified as "low income". In other words, these elderly households are headed by an individual aged 60 or over with an annual income of $5,300 or less. What steps is the Food and Nutrition Service taking to ensure that these low-income elderly have full access to the commodity distribution and other low-income nutrition programs?

Answer: Elderly individuals may receive food program benefits through eight different Food and Nutrition Service programs. The programs that have a specific elderly component are the Commodity Supplemental Food Program (CSFP), the Nutrition Program for the Elderly (NPE), and most recently the Child Care Food Program (CCFP). In CSFP, which provides food packages for the elderly, we are proposing to maintain services in Fiscal Year 1989 at a caseload of about 80,000 persons per month. This program has served almost 90 percent more elderly in the first five months of Fiscal Year 1988 than in the same time period of the previous year.

NPE provides cash reimbursements and commodities for meals that are home-delivered or served in congregate settings. Commodities are being provided to elderly feeding programs at traditional usage levels during Fiscal Year 1988 and States and certain sites that accept 20 percent or more of their meal reimbursements in commodities are allowed to request bonus commodities. NPE will be able to subsidize 249 million meals in Fiscal Year 1989 at the legislated rate.

Adult day care centers are now allowed to participate in the CCFP through amendments from P.L. 100-237. These centers may receive reimbursements for meals served to persons 60 years of age or older and to impaired disabled adults of any age.

The Food Stamp Program (FSP) remains the cornerstone of FNS' food assistance efforts. Of the more than 7 million households that participate in the FSP, more than one-fifth have one or more elderly members. There are many special provisions and accommodations that recognize the special needs of the elderly and serve to promote elderly participation in the program. For example, special income deductions are provided for households with elderly members. All medical expenses that exceed $35 a month may be deducted for elderly or disabled household members. These households may also deduct all shelter costs over 50 percent of the household's adjusted income. Elderly and disabled persons who have difficulty getting around can fill out the FSP application at home and can be interviewed by phone or at home. The certifying office can then issue stamps by mail. Additionally, households consisting of only SSI recipients are categorically eligible for FSP. State agencies can arrange for SSA offices to complete and forward FSP applications.

IMPROVING FOOD ASSISTANCE PROGRAMS

Question: Under the Administration's fiscal year 1989 budget, what improvements are being made to enhance the efficiency and effectiveness of the U.S. Department of Agriculture's Food and Nutrition Service in implementing its programs for the poor?

Answer: The agency is proposing to combine the appropriations for the Special Supplemental Food Programs (the Special Supplemental Food Program for Women, Infants and Children (WIC) and the Commodity Supplemental Food Program (CSFP)). This proposal is designed to allow more flexibility to States to target their WIC and CSFP services more effectively to meet the needs of women, infants and children in these two programs.

The agency is requesting $5.2 million to initiate an independent review of Child Nutrition meal payment claims to help States reduce reporting errors and ensure the validity of State claims.

In the Food Stamp Program we are requesting $10.2 million to redesign and implement a new coupon redemption process which will ensure complete accountability and minimize the opportunity for counterfeit stamps to be redeemed and limit the opportunities for stamps to be redeemed through unauthorized outlets.

To enhance the agency's efficiency in delivering funds to grantees and accounting for those funds, we are requesting $1.35 million for a new accounting system. The present system dates from 1983 and GAO has found it deficient in certain respects. The new system will reduce manual adjustments currently required and will enable the Food and Nutrition Service (FNS) staff to service grantees' funding needs more effectively.

We have requested $200,000 to initiate a work measurement system to enable us to better deploy our staff resources.

During 1989, the agency will complete the fourth year of our Information Resources Management (IRM) plan. We have requested an increase of $2.8 million to continue our efficiency and effectiveness through automation. Additional hardware purchases planned for 1989 will enable us to fully implement our plans establishing local information networks. Development and purchases of additional software are planned for 1989 to ensure that the hardware is used effectively.

TEMPORARY EMERGENCY FOOD ASSISTANCE PROGRAM

Question. As you know, the Temporary Emergency Food Assistance Program (TEFAP), under which surplus milk, cheese, and other commodities are distributed to low income families, is scheduled to expire in fiscal year 1989. To what extent will the Food and Nutrition Service be able to compensate for this reduction in food distribution to low income families?

Answer. Initially, I'd like to clear up one point of confusion. USDA is proposing to reauthorize the Temporary Emergency Food Assistance Program in the Fiscal Year 1989 budget, without State administrative funds. We will continue to distribute the commodities that are currently in surplus--butter, cornmeal and flour--and will resume distributions of cheese, nonfat dry milk, rice and honey if inventories again mount.

Low-income families will continue to have access to the Food Stamp Program, the cornerstone of the Nation's nutrition assistance efforts. A dozen other FNS programs are tailored to provide assistance to specific groups: infants, pre-school and school-aged children, pregnant and post-partum women, Indians and the elderly. Efforts to serve the Temporary Emergency Food Assistance Program participants should focus on these existing programs.

QUESTION SUBMITTED BY SENATOR GRASSLEY

TEMPORARY EMERGENCY FOOD ASSISTANCE PROGRAM

Question: We all recognize that the Temporary Emergency Food Assistance Program (TEFAP) will be a point of concern and debate throughout this appropriations process. Does the Department have an analysis on the utilization of this program, such as its clientele, benefits derived for nutritional concerns? I hope the Department has information to help Congress make informed decisions regarding the continuation of this program from a human welfare policy stand point.

Answer: As part of the Food Security Act of 1985 (P.L. 99-198), the Secretary of Agriculture was required to study the Temporary Emergency Food Assistance Program, including the population served and its characteristics. The study collected information from a nationally representative sample of over 2,500 recipients at 220 distribution sites. Among the areas we examined were the composition of households, their incomes, their participation in other assistance programs, the frequency of commodity receipt and the amount of commodities received, and how recipients viewed the program. T results of the study were reported to Congress in April 1987. W believe that this study provides Congress and the Department with necessary information to make decisions about the future of the Temporary Emergency Food Assistance Program. I will make sure that forward additional copies of the report to the Committee.

HUMAN NUTRITION INFORMATION SERVICE

QUESTIONS SUBMITTED BY SENATOR BURDICK

CONTINUING SURVEY OF FOOD INTAKES BY INDIVIDUALS (CSFII)

Question: The Continuing Survey on Food Intakes by Individuals has been criticized as inadequate for yielding useful information particularly because of its sample size and its methodology for selection of survey participants. Ms. Sims, how do you respond to such criticism, especially from the National Academy of Sciences? What steps is HNIS taking to correct flaws in the survey?

Answer: The Department is unaware of any criticism of the Continuing Survey of Food Intakes by Individuals (CSFII) by the National Academy of Sciences (NAS). In the early 1980's, the Department asked NAS to review the uses of the Nationwide Food Consumption Surveys and make recommendations for improving the surveys. The review by NAS was comprehensive, and the results were published by the National Academy Press in "National Survey Data on Food Consumption: Uses and Recommendations," 1984.

The Department initiated the CSFII in 1985 partly in response to recommendations by NAS. In the 1984 report, NAS stated:

> "Because of the need for statistical analysis of intraindividual variability, the Committee supports USDA's proposed plan for the repeated surveying of individuals over a 1-year period. The Committee believes that this will allow needed statistical analyses whose results will, over the longer term, permit determination of the best data collection procedures."

The 1985 and 1986 CSFII were considered as methodological surveys for the purpose of determining the most appropriate method for collecting trend information. The 1985 CSFII included two major innovations. First, it was the first nationwide dietary intake survey to be conducted each year (continuous collection). Second, it was the first nationwide dietary intake survey to employ a panel approach--repeated observations on the same individual over a 1-year period of time. HNIS believes that the collection of dietary information in surveys repeated each year is the most appropriate technique for detecting changes in food consumption over time. However, the panel approach has a number of drawbacks, including a drop in the response rate between the first and the sixth day of data collection and a high cost.

The CSFII planned for 1989 through 1996 has been redesigned to eliminate the panel approach and to include collection of dietary data on 3 consecutive days for all sex-age groups in the population. Interviewing for 3 consecutive days provides many of the advantages of the panel approach while maximizing the response rate and lowering the cost associated with collecting nonconsecutive days of dietary information. The redesigned CSFII will report data using a moving-average approach, an approach recommended by NAS; annual data will be provided after 2 years for middle-aged women and men and after 3 to 5 years for children and elderly persons.

The 1985 and 1986 CSFII have yielded much useful information. We are not aware of criticism to the contrary. In fact, data from these surveys have been used extensively by the Department, industry, and others since the first report and data tapes were released in late 1985. An example is the NAS study released earlier this year on "Designing Foods: Animal Product Options in the Marketplace," which cited the survey results repeatedly. While conducting the study, NAS asked the agency for special analyses from the CSFII.

The CSFII sample size was more than adequate to provide data for the two population groups surveyed--women 19-50 years and their children 1-5 years. These groups were selected because previous surveys have shown them to be more likely than other groups to have diets low in certain nutrients. Provided for the record is a list of results from the CSFII 1985, as follows:

Continuing Survey of Food Intakes by Individuals (CSFII) 1985

RESULTS

Foods

- Compared with 8 years earlier, women in 1985 consumed more skim and lowfat milk; carbonated soft drinks; mixtures that are mainly meat, poultry, and fish; and grain products. They reported consuming less whole milk, less meat, and fewer eggs. Generally, higher income and more educated women led in these food consumption changes.

- Mean intakes by 1- to 5-year-old children showed some of the same differences between 1977 and 1985 as their mothers. They consumed more skim and lowfat milk and less whole milk. They ate more grain products and less meat and eggs. But some differences suggest that women may have more concern for children's diets than they do for their own. These young children ate 30 percent more vegetables and fruits in 1985 than in 1977, while their mothers showed no increase. And the children drank less carbonated soft drinks in 1985, while their mothers drank more.

- Results from a study at the University of North Carolina using CSFII data show that women moved to lower fat selections within food groups rather consistently between 1977 and 1985. Investigators sorted foods in each of several food groups into higher and lower fat items and looked at the change in consumption of these items. In each group--milk, lunchmeat, fish, beef/pork, and poultry--the intakes of the lower fat items increased and intakes of the higher fat items decreased.

- Although high-income women made greater shifts away from whole milk and high-fat beef products than low-income women, they got extra fat from eating more cheese and cream desserts, rich baked goods, and table fats and salad dressings. Consequently, intakes as a percentage of calories from fat by high-income women were similar to those of low-income women.

- Comparisons of percentages of women and children having foods from the meat, milk, and grain products groups by region are similar. Slightly higher percentages of women in the West had legumes, some kinds of vegetables, and fruits.

- Women from lower-income households ate less food from the milk and vegetable-fruit groups and more from the grain group than women from higher-income households.

- Meat, poultry, fish intakes were alike across the three income groups, reversing a decades-old trend for high-income people to eat more meat than low-income people.

Nutrients

- The distributions of 4-day intakes suggest that folacin, iron, zinc, vitamin B-6, magnesium, and calcium pose the greatest dietary problems. More than 80 percent of the women did not achieve Recommended Dietary Allowance (RDA) levels for these nutrients. Of greater concern is that over 50 percent had 4-day intakes that were below 70 percent of RDA.

- Most of the children studied, especially among those 1 to 3 years old, failed to meet RDA for iron, zinc, and calcium. Many 4- to 5-year-olds had intakes below the RDA for these minerals and for vitamin B-6, magnesium, and folacin as well.

- More high-income women than low-income women met the RDA for some nutrients. But regardless of income, few women met the RDA for calcium, iron, zinc, folacin, magnesium, and vitamin B-6.

- These levels do not mean that severe nutrient deficiencies necessarily exist. RDA are set high intentionally to cover requirements of almost everyone in a given sex-age group. Even so, these nutrient intake levels for women of childbearing age and their young children indicate that guidance and food assistance programs should continue to stress the importance of consuming a varied diet and provide special information about good sources of these nutrients.

- About 37 percent of the calories in women's diets came from fat. This is above the 30 to 35 percent most authorities suggest, but below the 40 percent or more quoted from our earlier surveys. The mean percentage of calories from fat varies little by income.

- Only 12 percent of the women had fat intakes over 4 days that furnished less than 30 percent of calories--the amount suggested by some authorities such as the National Cancer Institute and the American Heart Association (AHA). And 33 percent had diets with fat providing less than 35 percent of calories--the level mentioned by the Food and Nutrition Board. Only 10 percent had diets with saturated fat below the 10 percent of calories that the AHA suggests.

- Consumption of 300 milligrams or less of cholesterol, as suggested by the National Heart, Lung, and Blood Institute, was achieved in 62 percent of the women's 4-day diets.

- The women with lower fat and lower cholesterol diets had lower mean intakes of calcium, iron, and zinc than other women had. This does not mean that nutritious diets with fat at less than

30 percent of calories cannot be planned, but it cautions us that guidance on how to reduce dietary fat must also emphasize getting needed nutrients. Otherwise, as with these women, nutrient levels may be adversely affected. It makes us wonder about guidance that suggests that meat, with its highly available iron and zinc, is an undesirable food.

- With respect to sodium, 86 percent of women had intakes of less than 3.3 grams per day, which was the top of the range suggested for adults by the Food and Nutrition Board in 1980. The sodium data from the survey do not include sodium in salt added at the table.
- Measures of dietary fiber are not as accurate as measures of most vitamins and minerals because the food composition data base is at an earlier stage of development. The National Cancer Institute suggests consuming 20 grams or more of dietary fiber per day. Estimates indicate that only 5 percent of the women consumed this much.
- About 6 out of every 10 women and children took supplements regularly or every so often in 1985. This is an increase from 4 out of 10 women and less than 5 out of 10 children in 1977.

Eating Patterns

- Snacking increased between 1977 and 1985. In 1977, about 60 percent of the women and children reported snacking on the survey day. In 1985, about 80 percent did so. Essentially all women and children snacked at least once over the 4 days in 1985. Snacks were important energy and nutrient providers, especially for the young children. Snacks furnished 19 percent of the energy and 9 to 23 percent of individual nutrients for children over the 4 days.
- Eating away from home also increased between 1977 and 1985. The proportion of women eating out increased from 45 percent in spring 1977 to 57 percent in spring 1985. Over 4 days in 1985, 88 percent of the women and 79 percent of the children ate out at least once.
- The proportion of total intake that women ate away from home differed among food groups. Women consumed over 40 percent of their alcoholic beverages and soft drinks and 30 percent of their meat, poultry, and fish away from home. They had the smallest proportion of their milk and milk products away from home.
- Food eaten away from home was an important contributor of women's food energy and nutrients. The proportions of energy-providing nutrients--fat, carbohydrate, and protein--were a little higher than those of most minerals and vitamins. Young children's food consumed away from home provided 19 percent of their energy intake and 13 to 17 percent of their vitamin and mineral intakes.
- Although almost all women and children reported eating breakfast

at least once during the 4 days in 1985, only 53 percent of the women and 85 percent of the children had breakfast on each of the 4 days.

- The nutrient contribution of children's breakfasts is substantial. Although breakfasts over the 4 days accounted for only 21 percent of calories and 17 percent of fat, they provided 30 percent or more of many important nutrients.

Question: It has been said that the Continuing Survey is expected to provide more timely data and cover high risk groups. What is sacrificed in terms of methodological changes, non-response bias, and small sample sizes?

Answer: We do not believe that the Continuing Survey of Food Intakes by Individuals (CSFII) as redesigned requires a sacrifice of any of the above three items.

Methodology. The methodology planned for the 1989 CSFII is the same as that used for the 1987 Nationwide Food Consumption Survey (NFCS). Although both were designed to be comparable with the NFCS 1977-78, we introduced some improvements in procedures in 1987 that we believe enable us to provide more accurate data. These improvements include:

- Interviewing.--Probing by interviewers on the amount and type of fat consumed, on salt added in preparation, and on "forgotten" items. This probing was necessary to support assessments of diets for fatty acids and sodium, and to derive more accurate estimates of fat trimmed from meat and fat added to vegetables.

- Coding.--A computer-assisted coding procedure that speeds up processing and reduces coding errors.

- Nutrient data base.--The nutrient data base is dynamic; it is updated and expanded as new or improved data become available.

To study the effect of these changes, HNIS is undertaking a "bridging" study comparing 1977 procedures with 1987 procedures. This study will allow us to determine which changes were due to improved survey methodology and which were due to actual changes in eating patterns. In addition, the computerized nutrient data support system, including the recipe and documentation system, will permit specification of changes in nutrient intakes that occur due to fortification and/or enrichment changes; improved, more precise nutrient analysis procedures; or to changes in what individuals are actually consuming.

HNIS will continue to improve survey methodology and the nutrient data base as appropriate. We are aware of the implications of these changes for comparing results from the Continuing Survey and from the decennial surveys. The Agency is establishing a procedure to document the changes and, as possible, to measure their effect on food and nutrient intakes.

Nonresponse bias.--Nonresponse and its bias is becoming an increasing problem, not only in the Nationwide Food Consumption Surveys but in all surveys--both Government and private. Nonresponse bias may be a problem if: (1) Nonrespondents represent a large proportion of those samples and (2) values of a variable(s) are distributed differently for respondents and nonrespondents. We have and are continuing to take steps to remove this bias. We are including in our protocol extensive nonresponse followup studies so that we can identify sociodemographic characteristics of our nonrespondents. A two-part analysis is under way on CSFII 1986 to determine differences, if any, in distributions between respondents and nonrespondents.

(a) Distributions and means of variables from the 1986 CSFII, wave 1, were compared with corresponding data from the U.S. Census. Agreement was high for urbanicity, geographic location, race, ethnic origin, and employment status. In general, weighting of CSFII data has adjusted for differences in distributions.

(b) Nonresponding CSFII households are being surveyed. Preliminary analysis indicates that total household sizes and numbers of women and children per household were similar between responding and nonresponding households.

The combined 1985/86 CSFII response rate was 74.5 percent for the core sample and 88.1 percent for the low-income sample. These rates are calculated based on the number of eligible households providing at least one interview, and are comparable with rates from other Government surveys. There was a considerable drop-off in the response rates for days 2-6 of the panel. The CSFII 1989 has been redesigned to remove this problem.

Small sample sizes.--The samples for the 1985 and 1986 CSFII were more than sufficient to provide reliable national and regional estimates of the dietary status of women and children. They were not, and did not intend to be, sufficient to provide estimates for all sex/age groups.

The redesign of the CSFII for 1989 will incorporate a moving-average approach for publishing the data. This approach, recommended by two National Academy of Sciences committees, will permit small sample sizes, reducing cost, while permitting the publication of annual estimates of the food and nutrient intakes of the population.

In summary, the CSFII 1985 and 1986 were highly successful surveys. First, they provided information on two age groups that past surveys indicated were at nutritional risk: women 19-50 years of age and their children 1-5 years of age. Second, the first results of these surveys were made available within 6 months after completion of data collections; we doubt this has been accomplished by any other agency that conducts major surveys such as these. We expect the CSFII 1989 to provide data that is equally as important on as timely a basis.

Question: The 1989 budget proposes an increase for analysis of the Continuing Survey. What is the increase that is estimated for the Continuing Survey? What is the full amount that is estimated to be spent on the Continuing Survey in 1989?

Answer: In Fiscal Year 1989, we have requested an increase of $75,000 to begin analysis of the 1989 Continuing Survey of Food

Intakes by Individuals (CSFII). The full amount for data collection and analysis of the CSFII in 1989 is estimated to be $1.6 million.

STANDARD DEFINITIONS

Question: USDA asked the National Academy of Sciences to develop standard definitions of hunger, malnutrition, and related nutritional status terms. Were these definitions ever achieved? If so, for what terms? What steps have been taken to develop standard definitions for these commonly used and commonly misconstrued terms? When will standard definitions be provided? How will these definitions be incorporated into the work of HNIS?

Answer: In 1985 and 1986, the Human Nutrition Information Service (HNIS) had several discussions with the National Academy of Sciences concerning the development of standard definitions of hunger and malnutrition. The project proposed by the Academy was primarily related to nutritional status, not hunger and malnutrition. Nutritional status refers to the relationship between diet and health, with specific emphasis on chronic disease; this work is the responsibility of the Department of Health and Human Services. The responsibility of USDA is for assessment of dietary status--the nutritive value of food eaten by the population as a whole. Since the proposal was outside the scope of USDA's mission, we did not proceed further. To our knowledge, the Academy has not undertaken either a study of hunger and malnutrition or of nutritional status.

NUTRITIONAL QUALITY

Question: What is the difference between nutritional quality and nutrition content of foods? Which agency of the Federal Government is responsible for collecting and analyzing information about nutrition quality? How is this role being undertaken?

Answer: Nutritional quality and nutrient content are two different but related concepts. Nutritional quality generally refers to an assessment of foods or diets against specific standards. Nutrient content refers to the amounts of nutrients in specified amounts of foods. The nutritional quality of foods or diets depends in part on the nutrient content of those foods or diets. The USDA is responsible for work related to both nutritional quality and nutrient content. The Food and Drug Administration (FDA) has specific responsibilities related to the toxicity that may occur from excessive intakes of specific nutrients. FDA and the Environmental Protection Agency monitor food to be sure it does not include unintended substances that are harmful; this work relates to overall quality, but not specifically to nutritional quality.

Nutritional quality. USDA's Human Nutrition Information Service (HNIS) conducts nationwide surveys to collect information on the foods used by households and the foods eaten by individuals. The diets of households or individuals are assessed relative to the Recommended Dietary Allowances (RDA) and for nutrient density--that is, the diet's nutrient content in relation to its energy value. Making these assessments requires information on the nutrient content of foods. The nutrient data base developed by HNIS for conversion of foods to their nutrient equivalents includes values for food energy and 27 nutrients and other dietary components.

Data on dietary status--or the nutritional quality of diets--is published in summary form at the completion of each survey. The information is also available on tape. In addition, HNIS has a comprehensive research program to appraise diets and develop dietary guidance. Specific studies are conducted which require knowledge of the nutritional quality of diets. Some examples include:

(1) The development of the USDA Family Food Plans, the lowest of which is the basis for the Food Stamp Allotment

(2) Identification of problem nutrients and sex/age groups most frequently experiencing shortfalls

(3) Identification of dietary changes required to meet guidelines proposed for improved health

(4) Identification of socioeconomic factors associated with diets that fail to meet nutritional criteria.

The term "nutritional quality" may be used to refer to specific foods, although the designation of specific foods as of low or high quality is highly subjective. HNIS stresses the importance to the diet of eating a variety of foods, while also providing to the public information on foods that are good and important sources of nutrients.

Nutrient content. The HNIS National Nutrient Data Bank (NNDB) is the national repository for analytical data on food composition. Results from laboratory analyses conducted by industry, Government, universities, and others are evaluated and entered into the NNDB. Research to fill knowledge gaps is planned and funded by HNIS. HNIS also works closely with the Nutrient Composition Laboratory of the Agricultural Research Service to obtain needed data. Information in the NNDB is used to convert foods from survey data to their nutrient equivalents. It is also made available to professionals and the general public through a series of data tapes and Agriculture Handbook No. 8, "Composition of Foods...Raw, Processed, Prepared."

INTERAGENCY COMMITTEE ON NUTRITIONAL MONITORING

Question: When was the Interagency Committee on Nutritional Monitoring formed? Since the Committee received its mandate in 1969, why has it not been officially formulated? What have been the specific accomplishments of the Subcommittee on Nutrition Monitoring Research over the past ten years?

Answer: An interagency committee to manage Federal nutrition monitoring activities is in the process of being formed. It will be co-chaired by USDA and DHHS. I am not aware of any Congressional or Executive mandate to form such a committee. The Food and Agriculture Act of 1977 did require the Departments to submit a proposal for a comprehensive nutritional status monitoring system, but no specific committee was requested.

Such a plan was submitted in 1981 and it targeted the two major monitoring activities of the Departments, the USDA Nationwide Food Consumption Survey and the DHHS National Health and Nutrition Examination Survey. The management focus under the 1981 Implementation Plan was at the staff level within the two sponsoring agencies and between the Assistant Secretaries responsible for these two agencies.

The Implementation Plan was revised in 1987 in the National Nutrition Monitoring System Operational Plan. The broadened goal of this revised plan made it necessary to broaden the management structure as well. Since submitting the Operational Plan, the Departments have been examining the most efficient management mechanism. Out of these discussions, we have decided to form an interagency committee. We hope to have the first meeting this summer.

The Subcommittee on Nutrition Monitoring Research of the Interagency Committee for Human Nutrition Research was formed in late 1986 after the submission to Congress of the Federal 5-Year Plan for Human Nutrition Research. The Subcommittee held two formal meetings in 1987 to determine the scope of work and definition of terms to be used. The goal of this group is to identify research gaps that are of particular importance to nutrition monitoring activities and then to encourage research groups to help fill these gaps.

NUTRITIONAL MONITORING - GENERAL

Question: What portion of USDA/HNIS and /FNS budget has been spent on nutrition monitoring in each of the past five years? Specify whether funds have been spent on analyzing or collecting data.

Answer: During the past five Fiscal Years, the following amounts and portions of the Human Nutrition Information Service (HNIS) budget have been spent on nutrition monitoring:

	$ (000)	Proportion of budget (%)
FY 1983	5,178	70
FY 1984	4,522	75
FY 1985	5,686	75
FY 1986	10,738	86
FY 1987	4,386	65

In addition, in 1984 the Food and Nutrition Service (FNS) transferred $2.0 million to HNIS for the Puerto Rico Nutrition Survey and the Low-Income Continuing Survey of Food Intakes by Individuals.

The breakout of spending for nutrition monitoring is as follows:

	Food Consumption			Nutrient Data Research	Food Supply	Nutrition Knowledge/ Attitudes
	Intramural analyses	Extramural analyses	Data collection			
	$000					
FY 1983	1,300	1,748	--	2,030	100	
FY 1984	1,300	627	3,139	1,356	100	

FY 1985	1,400	118	2,646	1,366	105	50
FY 1986	1,600	1,094	6,206	1,678	110	50
FY 1987	1,600	1,027	--	1,594	115	50

Question: What surveys have been conducted? What has been the cost of each in each of the past five years?

Answer: During the past five years, we have conducted five surveys. The surveys are usually funded the year before data collection to permit time for survey planning. The surveys and their costs are listed below:

Fiscal Year	Survey	Cost
1984	Puerto Rico Nutrition Study	$1,030,033
1984	Continuing Survey of Food Intakes by Individuals (CSFII) 1985	2,109,173
1985	CSFII 1986	2,645,876
1986	Nationwide Food Consumption Survey 1987	6,154,150
1986	CSFII Nonresponse Followup	51,699

Question: What surveys are in progress? What is the funding currently being spent on each of these?

Answer: The Nationwide Food Consumption Survey 1987 is now in progress. Data collection will be completed in June 1988. The survey was funded with Fiscal Year 1986 funds, and it cost $6.2 million.

NUTRITION MONITORING RESEARCH

Question: Please list HNIS accomplishments with respect to nutrition monitoring research over the past five years.

Answer: The Human Nutrition Information Service (HNIS) has been in the forefront in sponsoring research relative to nutrition monitoring. In the past 5 years, HNIS has sponsored nutrition monitoring research in three areas: methodological studies to improve survey procedures; indepth analyses of survey data; and food composition analyses. Much of this work has been completed on an extramural basis.

Survey methodology

Sixteen studies have been completed in the past 5 years. Results have been used to plan the 1985, 1986, and 1989 Continuing Survey of Food Intakes by Individuals and the 1987 decennial Nationwide Food Consumption Survey. A listing of these studies follows:

FY-1983

(1) Conduct a pilot survey of methods for measuring food intakes of individuals in the low-income population, Phase II (Westat)

(2) Development and and testing of food portion measurement guides for use in dietary intake surveys (Case Western Reserve Univ.)

(3) Development and validation of a food-frequency questionnaire (University of Michigan)

(4) Development of a shortened nutrient data base for dietary surveys (University of Missouri)

(5) Utilization of national food consumption data (National Academy of Sciences)

FY-1984

(1) Validation of increased accuracy of NFCS procedures (University of Arizona)

(2) Further exploration of form, structure, and sequence of nutrition information for household food managers (Pennsylvania State University)

(3) Assessing dietary intake; an analysis of the frequency of use of specific food groups and nutrient content of diets reported in 1977-78 NFCS as a basis for proposed alternate methods of data collection (Pennsylvania State University)

FY-1985

(1) Development of methodology for predicting nutrient intake (University of Missouri)

(2) Frequency of use of food groups as a basis for alternative methods of data collection (Pennsylvania State University)

FY-1986

(1) CSFII Nonresponse Followup (data collection) (National Analysts)

(2) Microcomputer pretest for the Nationwide Food Consumption Survey (Creative Associates, Inc.)

(3) Development and validation of a food frequency questionnaire (University of Michigan)

(4) A study of methodological issues in food consumption surveys (University of Arizona)

(5) A study to analyze methodological factors affecting the measurement of dietary status (Iowa State University)

FY-1987

(1) Bridging study: NFCS 1977-78/CSFII/NFCS 1987 (National Analysts)

Indepth analyses of survey data

Thirteen studies have been funded in the past 5 years. Results from some of these studies will contribute to improved survey methodology; results of others are used in the development of the Department's food policies and programs and nutrition education research. A listing of these studies follows:

FY-1983

(1) Study the effect of food stamp use and other socioeconomic factors on food use and dietary status of households and individuals (University of Missouri)

(2) Use of convenience foods by U.S. households (Virginia Polytechnic Institute and State University)

(3) Economies of scale and seasonal variation in household food use (Washington State University)

FY-1984

(1) Food cost and nutritional status (University of Missouri)

FY-1986

(1) A study on dietary status and eating patterns (University of North Carolina)

(2) A study of health-related factors affecting dietary status (University of Arizona)

(3) A study of changing household organization and structure of demand for food in the U.S. (Mississippi State University)

(4) A study on the nutritional quality of diets of population groups in the USDA CSFII-85 (Utah State University)

(5) A study of determinants of food group consumption patterns (University of North Carolina)

(6) A study on the relationship of food groups and dietary intake (Cornell University)

FY-1987

(1) An analysis of variations in food consumption across household types and over time (Cornell University)

(2) An analysis of the importance of socioeconomic, demographic, and personal and health-related factors and food product attributes on U.S. nutrient intakes and implications for the dietary status of the household (Washington State University)

(3) An analysis of the effect of economic, demographic, and food choice variables on household nutritional adequacy in the United States (University of California/Berkeley)

Food composition analyses

As the result of these analyses, the Department has made significant advances in the area of nutrient content of diets. In 1988, reliable nutrient data are available to evaluate the intakes of individuals for calories and 28 nutrients, compared with only 14 nutrients in 1977. Added nutrients and other food components include many considered to be of public health importance--cholesterol, fatty acids, dietary fiber, sodium, potassium, carotene, folacin, zinc, copper, and vitamin E. Not only has the number of nutrients been expanded, but the quality of the food composition data has increased significantly. This is due to improved methods for laboratory analysis as well as improved sampling on a nationwide basis of those foods that contribute significantly to the intakes of specific nutrients.

A listing of extramural studies on food composition funded by HNIS in the past five Fiscal Years follows:

FY-1983

(1) Mexican fast-food analyses (University of Arizona)

(2) Nutritional evaluation of solid and liquid portions of selected canned fruits and vegetables (University of Idaho)

(3) Nutrient composition of fried chicken (Kansas State University)

(4) Determination of individual vitamin A-active compounds in foods from several geographical locations of the U.S. (University of Maine)

(5) Amino acid composition of foods (University of Massachusetts)
(6) Nutrient composition of cooked separated lean meat and poultry (University of Missouri)
(7) Investigations of the carbohydrate fractions of foods--raw, processed, prepared (National Food Processors Association)

FY-1984
(1) Compilation of lipid components of foods (University of Maryland)
(2) Nutrient content of cereal products and baked goods (University of Georgia)
(3) Determination of vitamin A-active compounds in foods from several geographic locations of the U.S. (University of Maine)

FY-1985
(1) Nutrient content of selected miscellaneous foods purchased in the U.S. (Shankman Laboratories)
(2) Proximate composition and yield of fried foods (University of Idaho)
(3) Nutrient composition of frozen prepared foods (Shankman Labs)
(4) Determining the nutrient content of 50 selected cereal products and 50 selected baked products (University of Georgia)

FY-1986
(1) Nutrient analyses of mixed dishes and ingredients (Hazleton Laboratories America, Inc.)
(2) Analysis of selenium in foods (Hazleton Laboratories)
(3) Nutrient analysis of selected foods (University of Georgia)
(4) Analyses of dietary fiber in foods (Hazleton Laboratories)
(5) Nutrient analysis of recipe-prepared foods (University of Idaho)

FY-1987
(1) Analysis of selenium in foods (Hazleton Laboratories)
(2) Additional analyses of selenium in foods (University of Missouri)
(3) Determination of gross energy of selected foods (Webb Foodlab, Inc.)
(4) Nutrient analyses of specialty fruits marketed in the United States (University of Georgia Research Foundation)
(5) Variability in sugar content of foods (University of Georgia)
(6) Nutrient analysis of trace minerals(Woodson-Tenent Laboratories)

Question: What specific work has the Western Human Nutrition Research Center conducted in conjunction with the Subcommittee on Nutrition Monitoring Research? Name these projects and funds expended each year for the past five years.

Answer: The Subcommittee on Nutrition Monitoring Research, formed in late 1986 and co-chaired by Drs. Suzanne Harris, USDA, and Michael McGinnis, DHHS, has met only twice, and is now identifying research gaps to meet nutrition monitoring needs. In addition to this, the staff from the Human Nutrition Information Service (HNIS), the Food and Nutrition Service (FNS), and the Agricultural Research Service (ARS) of the USDA through its Subcommittee for Human Nutrition have met recently on two occasions with the Director of the Western Human Nutrition Research Center (WHNRC) to focus specifically on findings of the ARS Human Nutrition Research Centers and on nutrition monitoring research needs. At both meetings, a scientist from the National Center of Health Statistics (NCHS) was present to represent the interests of the National Health and Nutrition Examination Survey (NHANES). Such discussions provide ARS scientists with a better understanding of specific research questions of importance to HNIS and NCHS.

The projects funded at the WHNRC during each of the past 5 years are shown in the attached table.

[The information follows:]

Estimated Funding
ARS Nutrition Research Projects at WHNRC
During Period FY 1984 through FY 1988

	FY 1984	FY 1985	FY 1986	FY 1987	FY 1988
Computerized Food Scales for Dietary Assessment..............	$ 171,976	$ 136,000	$ 280,526	$ 208,522	$ 277,274
Nutritional Status and Performance (Water-soluble Vitamins)............	190,440	341,500	323,427	470,662	473,488
Develop Human Body Composition Measurement Methodology.............	214,819	367,200	404,093	414,092	406,519
Evaluate Total Body Electrical Conductivity Method for Body Composition...................	60,000	--	--	--	--
Establishing Energy Expenditure Methodology--Effect on Performance..	251,229	433,900	436,817	505,756	508,794
Improved Methodology for Evaluating Nutritional Status..................	568,500	568,500	421,216	710,147	714,412
Effect of Nutrient Intake Patterns On Human Nutritional Status and Performance (B-Vitamins)............	916,618	346,700	657,604	277,618	279,285
Diet Immunocompetence and Nutritional Status Assessment.......	--	--	--	237,521	296,448
Pilot Epidemiology Studies in Thrombosis	146,302	615,500	--	--	--
Human Dietary Requirements for:					
Fat and Fatty Acids	202,400	152,800	594,060	662,369	766,348
Minerals (calcium, magnesium, zinc, iron, copper)................	607,716	453,500	131,368	222,424	223,759
TOTAL	$3,330,000	$3,415,600	$3,249,111	$3,699,111	$3,946,327

Question: What funds are currently spent on nutrition monitoring research and for what purpose?

Answer: The nutrition monitoring research to be provided by the Agricultural Research Service (ARS) in Fiscal Year 1988 is estimated as follows:

1.	Devising improved nutritional status assessment methodology	$2.07 million
2.	Developing improved food intake methodology	0.9 million
3.	Development of improved assay methods and measuring nutrient content of foods	1.3 million
4.	Measuring bioavailability of nutrients in foods and diet mixtures	7.84 million

In addition, ARS will fund research relating to nutrient requirements and health maintenance amounting to an estimated $27.3 million.

Human Nutrition Information Service (HNIS) funding of nutrition monitoring projects and their purposes were discussed earlier.

DIETARY GUIDANCE

Question: What dietary guidance material has HNIS issued in 1987? In 1988? And what is planned for 1989?

List any publications (dietary guidance) that have been issued during the past five years. To whom have these publications been distributed and in what amount?

Answer: The following is a list of publications which relate specifically to the Dietary Guidelines for Americans. The list begins with the first edition of "Nutrition and Your Health, Dietary Guidelines for Americans." Included were publications developed solely by HNIS or cooperatively with other groups. HNIS prints a certain number of publications as information copies to be distributed to professionals in the field of nutrition or related fields, journalists, and other information multipliers. The Government Printing Office (GPO) prints copies for sale through their own offices and through the Consumer Information Center. Their audience is largely consumers, but educators also obtain information for professional use through this source. The number of copies of materials printed by HNIS or GPO can be documented. However, other uses of materials are more difficult to document. For example, USDA's Extension Service and other Federal agencies frequently "ride" print orders. In addition, HNIS facilitates the reproduction of its materials by making available black and white, and color negatives of its publications as well as reproducible copies (copies specially designed for good quality reproduction). Since no Government-produced materials are copyrighted and since HNIS has encouraged the use of its information, materials are frequently excerpted in their entirety or in part.

HNIS has major responsibilities for developing research-based materials that provide dietary guidance to the general public. The centerpiece of these materials is the Dietary Guidelines bulletin, Nutrition and Your Health: DIETARY GUIDELINES FOR AMERICANS (HG-232, 1980, revised 1985; Spanish edition, HG-232S, 1985). This bulletin jointly published by USDA and the Department of Health and Human Services presents seven basic guidelines for a diet that supports health and reduces the risks of some diseases. A brief description of the rationale for each of the guidelines is given. Since 1980, USDA has distributed more than 12 million copies of this publication. Both the dietary guidance concepts expressed in the publication and the publication itself have been widely reproduced. After many years of free distribution, this publication will now be available from the Consumer Information Center at a cost of 50 cents each.

To provide additional help to individuals who want to follow the Guidelines, HNIS has developed publications with specific "how-to" information. These include:

1980-1983

o IDEAS FOR BETTER EATING offers ideas to help use the first edition of the Dietary Guidelines in daily choices of food and provides menus and recipes that are moderate in fat, sugar, and sodium. HNIS printed 125,000 copies. (Stock No. 001-000-04217-3. AVAILABLE FROM: GPO for $1.75)

o CALORIES AND WEIGHT...THE USDA POCKET GUIDE (AIB-364) is a concise, easy-to-use source of information on the calorie content of a variety of foods. It has been one of GPO's most frequently purchased publications. (Issued in 1974, revised 1981, current revision in press)

o FOOD 2...A DIETER'S GUIDE (1982) reviews up-to-date facts about weight loss and provides sensible and safe ideas for effective weight control. It includes 42 taste-tested recipes that are low in calories, yet imaginative and appetizing. (Distributed by the American Dietetic Association)

o FOOD 3...EATING THE MODERATE FAT AND CHOLESTEROL WAY provides dependable guidance on reducing total fat, saturated fat, and cholesterol in the diet, including tips on food selection and preparation and 20 recipes. (Distributed by the American Dietetic Association)

o SODIUM: THINK ABOUT IT (HG-237) tells what sodium is, what it does, where it's found, and how to moderate the amount you eat. (AVAILABLE FREE FROM: Public Awareness Office, FSIS, USDA, Washington, D.C. 20250.)

o THE SODIUM CONTENT OF YOUR FOOD (HG-233) lists the sodium content of 789 food and nonprescription drug items. HNIS printed 5,000 copies and GPO distributed 64,416 copies. (Stock No. 001-000-04179-7. AVAILABLE FROM: GPO for $2.25)

1984

o BETTER EATING FOR BETTER HEALTH is a nutrition course for consumers offered nationwide by the American Red Cross. The six-session course, which was developed by the Human Nutrition Information Service and the American Red Cross, is designed to help people develop the skills needed to make informed food choices for good health. (AVAILABLE THROUGH LOCAL RED CROSS CHAPTERS.)

- RECIPES FOR QUANTITY FOOD SERVICE (HERR-47) presents standardized recipes and food preparation information for quantity food services. It consists of a general information section, nine sections of recipes, and an appendix giving the nutritive value of the recipes on a per serving basis. The Dietary Guidelines were considered in both the selection and development of recipes for this file. HNIS printed 5,000 copies and GPO distributed 1,175 copies. (Stock No. 001-000-04379-0. AVAILABLE FROM: GPO for $7.50)

- YOUR MONEY'S WORTH IN FOODS (HG-183) brings together up-to-date information on meal planning and food shopping to help family food managers get their money's worth in nutritious foods. It also includes many practical cost-saving tips and cost-comparison tables. HNIS printed 5,000 copies and GPO distributed 21,534 copies. (Stock No. 001-000-04431-1. AVAILABLE FROM: GPO for $2.25)

1985

- NUTRITIVE VALUE OF FOODS (HG-72) offers a table of nutritive values for 900 commonly used foods in household measures. Other tables show equivalents by volume and weight; yield of cooked meat per pound of raw meat as purchased; Recommended Daily Dietary Allowances for nutrients; and amounts of fat that provide 30 and 35 percent of calories at specified calorie levels. HNIS printed 1,500 copies and GPO distributed 99,163 copies. (Stock No. 001-000-04457-5. AVAILABLE FROM: GPO for $2.75)

- THRIFTY MEALS FOR TWO: MAKING FOOD DOLLARS COUNT (HG-244) provides ideas on how people, especially older couples, can plan economical menus. It gives two weeks of sample menus plus over 40 recipes proportioned for two people. The recipes are moderate in fat, sugar, and sodium. Each recipe gives the number of calories per serving. HNIS printed 5,000 copies and GPO distributed 45,304 copies. (Stock No. 001-000-04459-1. AVAILABLE FROM: GPO for $2.50)

1986

- DIETARY GUIDELINES AND YOUR DIET (HG-232-1 through 232-7) is a set of seven short bulletins that provide easy how-to advice to help consumers apply the guidelines described in NUTRITION AND YOUR HEALTH: DIETARY GUIDELINES FOR AMERICANS. It contains information on nutritional needs, the nutrient content of foods, food selection, menu planning, and food preparation. Each of the bulletins focuses on one of the seven Guidelines. Using all of the Dietary Guidelines together is emphasized in the recipes and tips in the bulletins. Self-assessment activities or quizzes in each bulletin involve the readers with the information and encourage them to apply it to their own diets. HNIS printed 100,000 copies and GPO printed 200,000 copies. (Stock No. 001-000-04467-2. AVAILABLE FROM: GPO and Consumer Information Center for $4.50)

1988

- o COOKING FOR PEOPLE WITH FOOD ALLERGIES (HG-246) includes information on food selection and preparation helpful to those who must omit wheat, milk, eggs, corn, or gluten (a component of wheat, rye, and oats) from their diets. Recipes are marked so that it is easy to find those which omit the specific food to which a person is allergic. HNIS has printed 1,000 copies (4,000 more will be printed) and GPO will be printing copies. (Stock No. 001-000-04512-1. AVAILABLE FROM: GPO for $1.50)

- o USDA'S DIETARY GUIDELINES TEACHING KIT was developed for use in teaching Dietary Guidelines concepts to home economics students in junior and senior high schools. HNIS has printed 32,000 copies. (AVAILABLE FREE TO HOME ECONOMICS TEACHERS FROM: Teaching Kit, P.O. Box 90723, Washington, D.C. 20090-0723. Requests must be made on school letterhead stationery.)

Planned for 1988 and 1989

- o USDA'S DIETARY ANALYSIS PROGRAM FOR THE PC is a software package designed as an educational tool to provide Extension clients and other consumers with a relatively quick and easy nutritional analysis of their diets. (Expect to be available from: NTIS.)

- o FOOD PREPARATION AND MENU PLANNING DIETARY GUIDELINES STYLE (HG-232-8) tells why and how to plan healthful menus to fit your family; covers basic methods for preparing foods to reduce fat, sugars, and sodium. Recipes are included. (EXPECT TO BE AVAILABLE FROM: Consumer Information Center for 50 cents in 1988.)

- o EATING OUT DIETARY GUIDELINES STYLE (HG-232-9) gives tips to prepare you for the special challenges of eating Guidelines-Style when someone else is doing the cooking. Covers issues from fast foods to gourmet dining. (EXPECT TO BE AVAILABLE FROM: Consumer Information Center for 50 cents in 1988.)

- o BROWN BAG LUNCHES AND SNACKS AND DESSERTS DIETARY GUIDELINES STYLE (HG-232-10) provides lots of ideas for creative sandwiches, hot and cold main dishes, and Guidelines-Style lunch box treats; shows how snacks and desserts can make an important nutritional contribution to the diet. (EXPECT TO BE AVAILABLE FROM: Consumer Information Center for 50 cents early in 1989)

- o FOOD SHOPPING AND MEALS IN MINUTES DIETARY GUIDELINES STYLE (HG-232-11) shows how to use food labels and other supermarket shopping aids to find the best buys nutritionally; demonstrates how to tailor Guidelines-Style meals to fit today's busy lifestyles. Includes quick meal ideas and recipes for 30-minute entrees. (EXPECT TO BE AVAILABLE FROM: Consumer Information Center for 50 cents early in 1989.)

- o FACTSHEETS ON GOOD SOURCES OF NUTRIENTS (in development) presents the function and good food sources of nine vitamins, seven minerals, and fiber. Foods included as good sources are those that contain a substantial amount of the nutrient compared to its calorie content (nutrient density of 1.0) and those that contain at least 10 percent of the U.S. RDA for the nutrient in each serving. Tips on preparing foods that are good sources are presented. (EXPECT TO BE AVAILABLE FROM: GPO in 1988.)

Question: At the time that nutritional guidelines were published in 1985, seven more pamphlets were promised. Have these been published? When? In what numbers? On what topics? If not, when are they expected to be published?

Answer: Seven bulletins designed to help people implement the "Dietary Guidelines for Americans" were published in 1986. The series is entitled "Dietary Guidelines and Your Diet" (Home and Garden Bulletin 232, 1-7).

Topics. Each of the seven bulletins focuses on one of the guidelines giving specific information to help people understand the Guideline; suggestions on implementing the guidelines in menu planning and food preparation; recipes that follow all of the guidelines; and a self-assessment activity or a quiz to involve readers with the information and to encourage them to apply it to their own diet. An introduction reminds readers that, although the bulletin provides in-depth information on one guideline, all of the guidelines should be considered in selecting a healthful diet. The bulletins are targeted to the household food manager (the person most responsible for planning, selecting, and preparing food for the household) with average income and education. They are 8-1/2-by 11 inches in size, 4 to 12 pages in length, and printed in two colors.

Publication. HNIS printed 100,000 information copies of the bulletins for distribution to professionals, such as Extension agents, dietitians, public health nutritionists, and home economists and health educators. It is expected that these professionals would use the bulletins or information in the bulletins with their consumer audiences. Information copies were also given by HNIS to food industry representatives, journalists, and other information multipliers. Reproduction of the material in the bulletins and reprinting of the bulletins was facilitated by making the negatives (color and black and white) available for sale through the Government Printing Office and by making special copies designed for easy reproduction available free from HNIS. The Government Printing Office has printed 200,000 copies of the bulletins for sale ($4.50) through their offices and through the Consumer Information Center.

Study underway. HNIS is currently sponsoring a study with the Pennsylvania State University to evaluate the usability and appropriateness of these bulletins. The materials will be reviewed by household food managers to determine their reactions to content and style, readability, design, and layout. Information will also be collected regarding changes brought about by the use of the materials, such as changes in nutrition knowledge, and reported behavioral practices, e.g., food shopping and preparation. This research is also expected to contribute significantly to nutrition education theory and research techniques through the use of innovative qualitative evaluation methods.

New Publications. HNIS has several more publications in this series in development. Their focus will be on putting the Dietary Guidelines together in food shopping, menu planning, food preparation, eating out and in making bag lunches, desserts and snacks, and quick meals. They will be released beginning in 1988 through the Consumer Information Center's 50-cents program.

Question: Will dietary guidance material, including these pamphlets, be published in a manner that is understandable to the American public, without supplementary explanatory documents?

Answer: We hope that the material in "Nutrition and Your Health, Dietary Guidelines for Americans" (Home and Garden Bulletin 232 and 232S) is understandable to the target audience and useful in achieving its intended objectives. The bulletin is targeted to the broad audience of healthy American adults with at least a high school education. The bulletin has been published in English and Spanish.

The information in the bulletin is not intended for individuals who have special dietary needs because of medical conditions. Nor is the information presented in a way that would meet the special needs of individuals with low literacy skills.

The bulletin is intended to meet several objectives: (1) to serve as the centerpiece for nutrition education and information programs of the Federal Government; (2) to promote awareness of dietary guidance that will help Americans maintain and even improve their health; (3) to clearly state the Dietary Guidelines--these represent the conclusions reached by a Federal Advisory Panel and jointly supported by USDA and DHHS as to the best guidance that can be given to the American public on healthful eating; (4) to briefly present for a consumer audience the rationale for each guideline--that is, the diet/health concerns and background that are the basis for each of the guidelines; (5) to present a few tips that will help consumers get started in implementing the Dietary Guidelines; (6) to create an interest in obtaining more information on how to implement the Guidelines.

We are very concerned that the bulletin, both in content and style, be usable and appropriate for helping healthy American adults make informed food choices. Therefore, we will shortly be requesting proposals for cooperative research to determine the comprehension, acceptance and perceived usefulness of the bulletin. HNIS believes these data can provide the insights into both how and why certain content and stylistic elements affect comprehension and use of the information. The intent is to use the research results to make revisions of this bulletin and future print materials more responsive to audience needs.

Because the bulletin and the concepts expressed in it are intended to serve as the centerpiece for Federal nutrition education and information programs, it is intended to present the nutrition education message that is common to all programs. It is not intended to provide sufficient information to enable all audiences to implement the Dietary Guidelines in all settings; for example, the information needed by young adults, the elderly, the poor, the school food service worker, the high school student, etc. How the information is presented will depend on the background knowledge and literacy skills of the audience as well as on the delivery method.

SUBCOMMITTEE RECESS

Senator BURDICK. This ends today's hearing. Our next hearing will be held this Thursday at 10 a.m., April 21, in the same room. At that time we will hear from the representatives of the Commodity Futures Trading Commission and the Food and Drug Administration.

Until then, this subcommittee stands in recess.

[Whereupon, at 11:24 a.m., Tuesday, April 19, the subcommittee was recessed, to reconvene at 10 am., Thursday, April 21.]

AGRICULTURE, RURAL DEVELOPMENT, AND RELATED AGENCIES APPROPRIATIONS FOR FISCAL YEAR 1989

THURSDAY, APRIL 21, 1988

U.S. SENATE,
SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS,
Washington, DC.

The subcommittee met at 10 a.m., in room SD–138, Dirksen Senate Office Building, Hon. Quentin N. Burdick (chairman) presiding.

Present: Senators Burdick, Bumpers, Sasser, Cochran, and Grassley.

COMMODITY FUTURES TRADING COMMISSION

STATEMENT OF DR. WENDY L. GRAMM, CHAIRMAN

ACCOMPANIED BY:
MOLLY BAYLEY, EXECUTIVE DIRECTOR
MADGE BOLINGER, BUDGET DIRECTOR

OPENING REMARKS

Senator BURDICK. Good morning ladies and gentlemen. This morning, the Subcommittee on Agriculture, Rural Development, and Related Agencies will conduct its final hearing in which representatives of the executive branch will present their budget proposals for the 1989 fiscal year.

Today, we will hear from two independent agencies whose activities are intricately related to the growth and reliability of our agricultural sector. First, the committee welcomes Mrs. Wendy Gramm, who will testify before us for the first time since her recent appointment as new Chair of the Commodity Futures Trading Commission.

With the ever-expanding volume of futures and options trading, as well as recent scrutiny of factors affecting the stability of all our financial markets, Chairman Gramm has quite a leadership task before her.

Second, we will receive testimony from Commissioner Frank Young, an ardent and effective spokesman for the Food and Drug Administration. Acknowledging the ever-important role of FDA in assuring the safety of our foods, medicines, and medical devices, Commissioner Young has made notable progress in managing an agency often called upon to respond to public health emergencies.

We are pleased to have both agencies before us today and invite you, Mrs. Gramm, to begin our hearing today. Welcome and congratulations on your new appointment as Chair to the CFTC.

Will you proceed?

STATEMENT OF DR. WENDY L. GRAMM

Dr. GRAMM. Thank you very much, Mr. Chairman. I appreciate the opportunity to appear before you today to summarize our fiscal year 1989 budget request from the CFTC. Accompanying me today are Molly Bayley, Executive Director of the Commission; and Madge Bolinger, Budget Director.

BUDGET REQUEST

The Commission requests a fiscal year 1989 budget of $35.5 million, an increase of $2.7 million over the fiscal year 1988 level, or about an 8-percent increase. The budget will enable the Commission to fund 545 staff-years, an increase of 27 staff-years over the fiscal year 1988 level.

This growth in staff-years will allow the Commission to address staffing needs in a variety of areas, particularly those arising out of developments subsequent to the October market crash, including surveillance, market oversight and interagency coordination, and to strengthen its enforcement program.

As I am sure you know, since October 19, the Commission has been studying the activities surrounding the stock market break. The staff has completed four reports on the October events which analyze the activity in the markets during that period and make recommendations for strengthening those systems that protect the financial integrity of the futures markets and for increasing intermarket coordination and communication.

REVIEW OF OCTOBER MARKET EVENTS

Our review of the October market events indicates that the existing statutory framework enacted by Congress in the Commodity Exchange Act and the regulatory mechanisms put in place by the CFTC worked effectively. Our reviews, however, pinpointed a few key areas in which further improvements could be helpful. The Commission and the exchanges have been moving to take appropriate actions that will ultimately enhance the financial integrity of futures markets, including during periods of extreme price volatility; improve cross-market information sharing; implement mechanisms to cushion the impact of drastic price changes; and upgrade information systems and improve the already existing interagency and interexchange coordination and contingency planning actions, including international coordination efforts.

As you know, on March 18, the President signed an Executive Order establishing a Working Group on Financial Markets composed of the Secretary of the Treasury, the Chairman of the Board of Governors of the Federal Reserve System, the Chairman of the SEC, and the Chairman of the CFTC. The purpose of the Working Group is to consider the major issues raised by the numerous studies, any of the recommendations that have the potential to enhance the integrity, efficiency and competitiveness of the financial markets and the actions that are appropriate to carry out these recommendations. The Working Group is to report to the President within 60 days.

Meanwhile, the Commission has continued to carry out its ongoing responsibilities in market surveillance, enforcement, and exchange oversight. In addition to the regular schedule of rule enforcement reviews of each exchange, the staff is now in the process of conducting a special rule enforcement review of each exchange to ensure that the audit trail systems, which were fully implemented during this past year, are functioning properly.

The Commission has also continued to examine the applicability of the Commodity Exchange Act to various off-exchange instruments. In December 1987, the Commission published an advance notice of proposed rulemaking which requested comment from the public on the commodity-related risks associated with hybrid instruments in contemplation of developing a regulatory framework for the treatment of such instruments.

The Commission is continuing to expand its enforcement capability to assure customer protection and market integrity. During the last year, for example, the Commission has increased the size of the Western regional office in Los Angeles, and additional enforcement and audit staff will be placed there in the coming year. Investigation and litigation of complex cases will continue to consume substantial resources.

The Commission also finalized its rules regarding foreign futures and foreign options. This was a significant undertaking, as the Commission had to take into account the different legal systems and customs of other nations while still providing an appropriate level of protection for the market users.

LEVERAGE CONTRACTS

The Commission also completed, with the assistance of the National Futures Association, a survey of persons interested in engaging in the offer and sale of leverage contracts, as mandated by the Futures Trading Act of 1986. The staff now is drafting the report to Congress required by the 1986 act which will set forth the findings and recommendations of the Commission concerning whether leverage transactions serve an economic purpose and an appropriate regulatory scheme to govern leverage transactions should new firms be allowed to enter the business.

In February, the Commission published the results of a survey of hog, cattle, and feeder cattle futures and option positions held as of March 13, 1987. This report provided the users of the livestock markets with information regarding the market participants on that date.

The survey indicated that in futures markets, persons in commercial livestock and meat processing enterprises, including farmers or ranchers, commercial feed lot operators, packers and meat marketers, represent about 40 percent or more of all traders. In the feeder cattle futures market, commercial traders comprised 60 percent of the traders on the survey date. The percentage of open interest held by commercial interests in livestock futures varied from 35 percent to 60 percent.

INTERNATIONAL ISSUES

International issues continue to occupy an increasing amount of the Commission's time. The global marketplace requires cooperation among regulators in different countries. In addition to establishing new information sharing agreements and refining existing ones, the Commission is working actively with other foreign regulators to harmonize regulatory programs so that our markets continue to be competitive internationally while preserving their integrity and financial stability. This is an area where the Commission will continue to devote more of its attention in the coming years.

In conclusion, as you can see, during the past year, the Commission has kept pace with the tremendous growth in the futures and options market and maintained its regulatory vigilance. The Commission's effective regulation of futures markets is continuously refined and improved through increasing reliance on computer analyses and oversight of the self-regulatory programs of the exchanges and the National Futures Association.

The Commission is fortunate to have an excellent staff, and the 27 additional staff-years and $35.5 million requested for fiscal year 1989 will enable the Commission to continue to provide effective oversight regulation and enforcement of the industry it regulates.

I will be happy to answer any questions from the subcommittee.

PREPARED STATEMENT

Senator Burdick. Thank you, Chairman Gramm. We have your complete statement and it will be made part of the record.

[The statement follows:]

STATEMENT OF DR. WENDY L. GRAMM

I appreciate the opportunity to appear before you today to summarize the FY 1989 budget request of the Commodity Futures Trading Commission. Accompanying me today are Molly Bayley, the Executive Director of the Commission, and Madge Bolinger, the Budget Director.

The Commission requests a fiscal year 1989 budget of $35,547,000, an increase of $2,734,000 over the fiscal year 1988 level, or about 8%. This budget will enable the Commission to fund 545 staff-years, an increase of 27 staff-years over the fiscal year 1988 level. This growth in staff-years will allow the Commission to address staffing needs in a variety of areas, particularly those arising out of developments subsequent to the October market break, including surveillance, market oversight, and interagency coordination, and to strengthen its enforcement program.

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I will be happy to answer questions from the Subcommittee.

"BLACK MONDAY"

Senator BURDICK. Chairman Gramm, I congratulate you on your new position of leadership at the Commodity Futures Trading Commission. You certainly could not have arrived at the CFTC at a more interesting and demanding time. While I know that you are engaged in detailed discussions with the Agriculture Committee prior to the confirmation of your appointment, I would like to touch on a few areas of interest to this committee, as well.

Since "Black Monday" of last October, industry leaders and members of the Brady Commission have each had a hand in recommending changes in CFTC authority. What do you think about the suggestions that one super agency control both the stock and financial futures markets?

Dr. GRAMM. The question that I always ask is: Would that have made a difference on October 19, and I think that in the analysis that I have seen, in fact, changes, drastic changes in the regulatory structure would not have made a difference. In fact, in my view, I think that what markets need now is stability, including regulatory stability.

Senator BURDICK. You wouldn't combine the two markets?

Dr. GRAMM. No; our Agency has the expertise in regulating futures contracts. Our expertise is involved in protecting and ensuring the financial integrity of futures markets and making sure that those markets provide the risk transference function that customers want.

Frankly, I think that in our studies, as well as studies that have been done by others, it can be seen that the regulatory structure and the futures markets performed remarkably well during that October period. That is not to say that no changes were needed. We have made some improvements, because obviously, the price volatility and financial stress that resulted because of the price volatility have pointed up areas where improvements can be made, and they are being made.

Senator BURDICK. What is your view of SEC Chairman Ruder's remark to the Senate Banking Committee that the SEC should have a tie-breaking function when agreement on regulatory methods are not reached with CFTC, assuming, as Chairman Ruder did, of course, that SEC would have dominating authority? What about that suggestion?

Dr. GRAMM. I wouldn't agree with that. I believe CFTC does have the professional expertise concerning regulation of its markets. If you give that authority to another agency, any other agency, then you must remove that authority from CFTC.

I believe that coordination and cooperation ought to be enhanced, but coordination and cooperation implies some discussion among equals rather than another agency having authority over these particular markets.

Senator BURDICK. Do you believe that any flaws in the two systems can effectively be corrected by cooperation, and what steps has CFTC taken recently to foster this type of cooperation?

Dr. GRAMM. In looking at the intermarket issues that have arisen, it is my view that these are issues that are being discussed and that have been discussed, a number of them even prior to the October break.

My view about cooperation and coordination is that it is something that must be ongoing among the regulators and on exchanges, as well. It is something that we would promote and enhance.

Senator BURDICK. Some have suggested that the futures' market practice of allowing traders to put down only 10 or 15 percent of the face of a contract contributed to the October market crash. Do you believe this is true? Has CFTC required higher margins on security contracts since then?

Dr. GRAMM. The exchanges have the authority to set margins except in an emergency. CFTC asked the exchanges to look at the margins to determine their adequacy during periods of extreme price stress.

The exchanges have raised initial margins since the October break, though I might point out to you that billions of dollars in margins were collected during the October period without any real problem and no customer lost money due to a default of a clearing member of a clearinghouse in the futures market.

So the futures market, including the financial integrity of that market, performed very well during that October break. I would point out that the margin system in the futures market is very different from that in the securities market, so even though the initial margin for futures may appear to be a smaller percent of the underlying value as compared to the stock market, the structure is so different that indeed, my view is that the margins are consistent between the markets now.

Margins in the futures markets are not only adjusted from the first day, but under the market-to-market system, additional margin must be paid every day if the market moves against your position. In fact, during the market break period intraday margin calls were made and had to be paid to the clearinghouses within 1 hour of that call.

On the cash market side, on the other hand, someone can buy a share of stock and put down a margin which has a different function in the cash market. It is a down payment function, but they don't have to make that down payment for 5 days. In the futures market, the margin is a performance bond that you pay to make sure that you can perform on the futures contract that you have made. You must pay it immediately, and you must make additional payments and be prepared to make additional payments every day—at least every day, if not intraday, if the market moves against your position.

BUDGETARY ALLOCATIONS

Senator BURDICK. The CFTC budget includes an overall increase of $2.6 million over the 1988 appropriation, allowing for 27 additional staff for the Agency. In general, would you attribute the necessity for these increases to the rapid growth of the futures and option markets and the implementation of regulations under the Futures Trading Act of 1986?

Dr. GRAMM. Yes; I would. I would point out that this budget request was sent to OPM even before the October period, and the Commission felt at that time that the additional staff-years were needed because of the rapid market growth and also to enhance our enforcement efforts against fraud, boiler room operations, et cetera. Obviously, since the market break, we believe that we will be using these resources, if they are provided to us, even more effectively and intensively.

Senator BURDICK. Since the approved budget was submitted to OMB before the events and after the concerns of "Black Monday," would you anticipate any adjustments in the budget request if not in the funding and personnel needed, than in the function to which the funding and new staff might be applied?

Dr. GRAMM. As of this time, we believe that the 27 staff-years, as we have described, would be allocated in a way that we had described and expected earlier on. If we believe that changes might be needed in terms of how to allocate those 27 work-years, if that money is appropriated, then I would share that with you. But as of this time, the Commission believes that we would like to see those 27 work-years allocated according to what was planned even before the October break.

CFTC AGENDA

Senator BURDICK. What principal areas of focus do you see for the Agency in 1989 and in 1990?

Dr. GRAMM. In 1989 and 1990, I believe that there will be an increasing focus on international issues. This is a global marketplace, and international coordination among regulators, as I mentioned in my testimony, is an important area.

I also believe that our traditional areas of effective oversight of the exchanges and effective enforcement against fraud will continue to be important, so my view is that we will continue to focus on the traditional areas for the CFTC.

In addition, we will have international issues that will be high on our agenda and we have some complicated regulatory issues that are before us. One I mentioned is the whole off-exchange area. That is an area where we need to spend some time and effort. Clearly, the intermarket issues which are post-October break, are, again, regulatory issues of significant importance that we will continue to focus our attention on.

Senator BURDICK. We have got a document around here that you have perhaps heard of called the budget.

Dr. GRAMM. I have heard of it.

Senator BURDICK. How does this increase that you are asking for fit that budget?

Dr. GRAMM. We have asked for an 8-percent increase, and OMB has indicated that it fits within that budget.

Senator BURDICK. Thank you very much.

The Senator from Iowa?

Senator GRASSLEY. I only have one question, Mr. Chairman.

Chairman Gramm, welcome to the Commission, and welcome to what I presume is your first appearance before this subcommittee.

Dr. GRAMM. Yes; it is. Thank you.

OPTIONS PILOT PROGRAM

Senator GRASSLEY. I look forward to working with you. In my state, about the only talk I have had with the Commission or even the commodity problems lately have dealt with the experimental program or pilot project that your Commission is administering. Several farmers in my state have expressed interest in this project, making it work, cooperating with the Commodity Futures Trading Commission.

It is my understanding that four counties in my state were chosen. Is that right? And if so, how far along are we on that pilot project?

Dr. GRAMM. You are referring to the pilot project on the use of options?

Senator GRASSLEY. Yes.

Dr. GRAMM. It is being administered, in fact, by the Department of Agriculture. We are providing the technical expertise to them, and we have worked closely with the Department of Agriculture on that.

You are correct in that there are four counties in your state that are participating in that program, and there have been a number of meetings and educational programs that the CFTC has participated in even as late as these past few weeks, working with the Department of Agriculture in the administration of that program.

Senator GRASSLEY. This is a close working relationship? The two departments of government are working on this project as a cooperative effort?

Dr. GRAMM. Yes; it is.

Senator GRASSLEY. From your perspective, even though you aren't administering it, you see it moving forward as Congress intended, and smoothly?

Dr. GRAMM. Yes; it is, to my knowledge, it is.

Senator GRASSLEY. Mr. Chairman, I have no other questions.

SUBMITTED QUESTIONS

Senator BURDICK. That will conclude this phase of the testimony. I will submit questions to you in writing. Other Senators may also have some questions. I trust that you will get your answers back in a timely fashion.

Dr. GRAMM. Thank you very much.

Senator BURDICK. Thank you.

[The following questions were not asked at the hearing but were submitted for response for the record:]

QUESTIONS SUBMITTED BY SENATOR BURDICK

October 19, 1988, "Black Monday"

Question: Dr. Gramm, in view of the October 19 stock market drop, do you know of anything that we -- Congress or the Committee -- need to do to be prepared for another or for a similar occurrence? Is some action on the part of Congress necessary?

Answer: The Commodity Futures Trading Commission (CFTC) has been responding actively to various of the regulatory issues raised by the events of October 19, 1987. In particular, the CFTC has been coordinating closely its response with other government regulators. Along with others, the CFTC issued extensive studies regarding the events of October 19, 1987 and surrounding days and identified areas of needed change. Flowing from those studies, the Commission has concentrated its efforts on making explicit the procedures it follows during volatile markets, improved information sharing, development of circuit-breaker mechanisms, augmentation of financial safeguards, and better coordination among self-regulators, including greater information sharing and more coordination in market and financial surveillance and deterrence of certain types of trading abuses.

The weaknesses identified by the CFTC regarding the October 19, 1987 market break can be addressed under the Commission's existing regulatory authority. In addition, the Commission's broad statutory emergency powers are sufficient to address future problems which may arise, and with respect to intermarket and/or interagency concerns, we believe those issues are most appropriately addressed by the regulatory and self-regulatory agencies directly involved. Intermarket and interagency cooperation and contingency planning in addressing these issues is progressing well. Accordingly, the CFTC believes that additional legislative authority is not necessary at this time. However, the continued support and encouragement of the Congress, in particular, the committees with jurisdiction over the involved agencies, has been helpful in spurring on these efforts. The CFTC believes that such continued support will aid in the final implementation of these remedial steps.

Question: One of CFTC's recommendations in its report on the market break, was for improved surveillance and reporting systems. Will you be able to make those types of improvements with the resources available in the 1989 budget?

Answer: Most of the recommendations made in the CFTC reports on the October market break involve action on the part of the exchanges and therefore will have only a limited impact on the Commission's resources. Regarding the recommendation for enhancing CFTC's reporting and surveillance systems, the Commission believes that these enhancements can be completed with the resources provided to the CFTC in the FY 1988 appropriation and the FY 1989 budget for the Commission as proposed by the President.

Question: There have been several major studies, a great deal of press attention and a great many congressional hearings about the performance of the futures markets and its regulators during and after the October 19 market crash. Would you tell us whether the futures markets performed adequately in the market crash and its aftermath and how the CFTC was able to monitor the market's performance. Was the CFTC able to get prompt, reliable data from the futures markets which allowed them to measure market performance adequately?

Answer: The stock price collapse of mid-October 1987 affected all markets--stocks, stock options and futures. During that period none of those markets performed satisfactorily in all respects. Stock index futures prices at times became disconnected from the underlying cash index price when the arbitrage link between the futures and the stock market was severed due to systems and other problems on stock and option exchanges. Generally, however, futures exchanges performed very well. Measured from the very low number of customer complaints received by the Commission and the futures exchanges, the exchanges' order execution systems and other procedures for handling customer business functioned very well under demanding circumstances. The margin and financial surveillance systems also withstood a severe test, and the financial integrity of the systems was maintained. No futures market customer lost money due to the failure of a futures commission merchant, and no futures firms failed due to the severe price collapse.

The Commission was able to get prompt information about market conditions throughout the crisis. Our financial surveillance staff maintained frequent contact with exchange clearinghouse personnel and conducted a number of direct inspections of futures commission merchants to be sure no financial problems developed that could jeopardize customer funds. CFTC surveillance staff relied upon our routine large-trader reports, augmented by trader interviews and contacts with exchange surveillance staffs, to monitor the activities of major market participants. Expeditious access to detailed audit trail data permitted Commission staff to identify quickly for investigation any potential instances of trade practice abuse. As a result of these efforts, plus coordination with the Securities and Exchange Commission, the Commission was kept fully and promptly informed of ongoing developments.

Question: It is my understanding that there is a great deal of information-sharing of market surveillance data among futures exchanges. Do you feel that the data is adequate to allow the exchanges to provide proper surveillance of their own markets? Is this information available to all futures exchanges which trade in financial futures. Is there an interchange of information between the futures exchanges which trade in stock indices and the equity markets, the stock exchanges?

Answer: It is correct that substantial information sharing exists among futures exchanges, on both formal and informal bases. Efforts to systematize information-sharing among futures exchanges have been underway since well before the market break and continue today. For instance, all futures exchanges and futures clearing organizations have entered into a formal agreement for the routine electronic exchange of margin pay and collect data with respect to dual and multiple clearing members. Further planned enhancements include incorporation of securities option premium data from the Options Clearing Corporation and securities data from the National Securities Clearing Corporation.

Commission staff also is developing enhancements to existing data systems, which collect large-trader and exchange clearing member position data, to produce aggregate intermarket position data for CFTC-regulated markets. In addition, Commission staff is investigating the feasibility of developing a system to aggregate and review intermarket position and trade data to enhance financial surveillance of futures commission merchants by the self-regulatory organizations, and a format for sharing such information on an as-needed basis with securities regulators and self-regulators for dually-registered firms. The Commission notes that the effectiveness of intermarket data sharing is hampered by the lack of timely, automated access to detailed transaction data from the securities markets. Nonetheless, the currently available aggregate intermarket data will enhance not only the financial surveillance capability of the Commission but could be made available to exchanges and other regulators during periods of volatile markets to identify concentrations of similar or related positions in futures held by customers and/or by multiple clearing members. Such a program also could provide a model for routine compilation of data to permit daily and ongoing assessment of intermarket exposures, including domestic and foreign securities as well as futures positions.

With respect to the sharing of market surveillance information between exchanges for surveillance and investigatory purposes, there is an information-sharing arrangement between both the Chicago Mercantile Exchange and the Chicago Board of Trade and the New York Stock Exchange. Once again, these arrangements are restricted to the extent that timely, automated detailed transaction data are not available from securities exchanges. These exchanges have shared surveillance data pursuant to these arrangements on several occasions.

Question: Dr. Gramm, do you believe that the futures exchanges and you, as their regulator, are making sufficient efforts to provide coordination among markets and in providing whatever market reform is necessary to prevent a recurrence of the October crash? I understand from the press that the White House Task Force, of which you are a member, has been making some progress in working with the futures exchanges and the stock exchanges. Could you give us an update on the progress which has been or is being made?

Answer: Both the Commission and the futures exchanges have made significant efforts to provide intermarket coordination and prevent some of the problems associated with the October stock market break. For instance, since the October break futures exchanges have taken several actions to augment their financial safeguards and improve intermarket coordination, and three of the four exchanges trading stock index futures contracts have instituted permanent price limits on their stock index futures and option contracts. However, although these limits are roughly comparable among the three futures exchanges, at present there are no comparable circuit breakers in the stock market or the stock index option markets regulated by the Securities and Exchange Commission. Officials at the highest level of the futures and securities exchanges have been consulting on a more coordinated approach to these and other issues, such as information sharing, and we expect progress in this area in the near future.

As you are aware, coordinated circuit breakers is one area of inquiry of the Working Group on Financial Markets, and we expect to report to the President on this and other significant issues in mid-May. Other areas being considered by the Working Group include the credit, clearing, and settlement and payments systems.

USDA FUTURES, OPTIONS PILOT PROGRAM

Question: USDA has launched a pilot educational program designed to assist farmers in planning marketing strategies, including use of options and futures contracts. I know that the Extension Service and the ASCS are involved, but I was wondering if CFTC is involved in any way in this effort. I understand that only producers who enroll in their respective commodity programs are eligible to participate and then CCC will guarantee them net return from their ASCS-approved marketing programs equivalent to the loan rate for the commodity. Does CFTC conduct any programs of this nature?

Answer: The Commodity Futures Trading Commission is not directly responsible for structuring or administering the pilot educational program. The Commission's involvement is one of cooperation and consultation.

During May 1987, the USDA sponsored, in conjunction with Commodity Futures Trading Commission and the Farm Foundation, a symposium on options, futures, and agricultural commodity programs. The purpose of the symposium was to review existing research and identify possible areas of research to assess the possible effects of farmer use of commodity futures and options markets on government programs and on the levels and variability of commodity prices, farmers' revenues, and government costs.

At this time the Commission understands from USDA that the Cooperative Extension Service is beginning its training program for individual agricultural extension economists, who in turn, will be working directly with farmers preparing them to participate in this pilot program. CFTC staff have participated in one training session helping to educate agricultural extension economists about the customer reparations program available through the CFTC to the customer who believes the Commodity Exchange Act or Commission rules were violated by the broker or firm handling his account.

The Commission also is coordinating the distribution of educational literature to state extension specialists.

COMPUTER TRADING

Question: Large volume computer trading has often been suggested as the major culprit responsible for the market troubles of last October. Is computer trading a common function in the futures market?

Answer: The futures markets use computers for a wide variety of functions including, but not limited to, clearing, margin computation, trade and market surveillance, and trade and price reporting. Although there currently is no system in the futures markets which provides for actual trading by computer, the Chicago Mercantile Exchange is developing such a system. That system, known as the Post and PreMarket Trade system, would use the Reuters computer network to continue trading in Chicago Mercantile Exchange contracts when the Exchange is closed. The Chicago Mercantile Exchange intends to submit this proposal to the Commodity Futures Trading Commission for review in the near future.

Sophisticated traders also use computers to monitor price relationships in markets and to help them execute complicated trades in an efficient manner. Some computer-assisted trading strategies in the stock market and in stock index futures and options have been termed program trading. Computers are used to monitor price relationships between specified baskets of stocks and prices of stock index futures and option contracts to identify tradable arbitrage relationships. Orders to execute purchase or sell instructions for those stocks also may be transmitted to the exchange floor through the New York Stock Exchange's computerized order routing system. However, the New York Stock recently embarked on a six-month pilot program that requires member firms to discontinue use of the computerized routing system, termed Super DOT, for arbitrage transactions when the Dow Jones Industrial Average changes up or down by 50 or more points during a day. The CFTC filed a comment letter with the Securities and Exchange Commission concerning this proposal, noting that a principal effect of arbitrage trading is to improve the economic coordination among markets and the pricing performance of each.

Similarly, traders use computers to analyze option premiums relative to prevailing futures and cash market prices for other commodities to determine when arbitrage opportunities exist due to temporary relative mispricing. These arbitrage trading strategies are dependent upon computers because of the complexity of the intermarket price relationships involved.

Question: Are the futures markets subjected to surveillance at the time transactions take place or is there a method for reviewing exchange contract trading retrospectively?

Answer: The futures markets are subjected to surveillance both during and after trading. During trading both the Commission and the exchanges engage in floor surveillance of trading and also monitor market moves. These surveillance activities provide the Commission and the exchanges with information relevant to possible trading abuses, the financial condition of member firms, and market composition and characteristics. In addition, after trading, both the Commission and the exchanges review transaction data to detect possible trading abuses and review position data for market and financial analysis purposes.

Question: What are the major differences between monitoring of the futures markets and stock exchanges?

Answer: The regulatory systems of the Commission for futures markets and the Securities and Exchange Commission for securities markets have many parallels, but there also are fundamental differences. The greatest similarities are in the two agencies' respective programs for financial surveillance, oversight of exchange rule enforcement activities, registration of industry professionals, and independent enforcement of federal statutes. The fundamental differences between the Commission's and the

Securities and Exchange Commission's regulatory approaches lie both in emphasis and in particular programs.

The futures regulatory system is tailored to the particular functions of futures markets, placing greater emphasis on market protection--preserving an efficient and competitive marketplace for hedging cash market risks and to facilitate price discovery and price basing. Within this framework, the Commission combines effective first-line self-regulation with a strong oversight program which includes a significant amount of direct review of market activity. Consequently, primary CFTC regulatory activities, as well as futures exchanges' activities, include direct surveillance of futures markets to prevent price manipulation and to enforce speculative position limits. One of the Commission's largest single program areas is its market surveillance program. In contrast, the SEC's market surveillance program is one of oversight of the direct programs of the stock and stock option exchanges, but does not engage actively in direct market surveillance.

Other areas in which the Commission combines oversight of industry self-regulation with direct review of market participants include trade practice and financial surveillance. In the trade practice area, the Commission issues public reports on the performance of exchanges in executing their mandated affirmative self-regulatory programs for the detection and prosecution of trading abuses. The Commission also has a computer-assisted trade practice surveillance capability that it uses to review trading directly for evidence of suspicious activity, and also conducts daily surveillance of exchange trading floors. Similarly, the Commission assesses financial self-regulatory programs of exchanges and clearing organizations through the issuance of public reports and also conducts direct audits of firms.

MARKET SURVEILLANCE, ANALYSIS AND RESEARCH

Question: The 1989 budget proposes an increase of six additional staff and funding increases for operations of the market surveillance, analysis and research program. With a 40 percent increase in the volume of futures and option trading since 1988, it is no doubt that additional personnel might be needed to keep up with demands on the agency. What new changes in surveillance activities will enable the agency to keep pace with the new volume of trading?

Answer: As noted in our budget statement, we anticipate that an increase in staff levels will be necessary to maintain current surveillance at an adequate level given the increase in the number of active markets. Although the FY 1989 budget request was made before October of 1987, price volatility in a number of markets, particularly stock index futures, has focused attention on intraday futures trading and its relationship to trading in underlying cash markets. This has increased the need to conduct special studies and to coordinate surveillance initiatives by futures and securities exchanges. These activities will require additional personnel if routine surveillance of other markets is to be maintained at adequate levels.

To conduct surveillance of intraday trading activity, the Commission's regulations require exchanges to record on their daily registers of trades the minute of execution for each trade. The information from the trade register is maintained in machine readable form and provides the most timely avenue of investigation for conducting the special studies of intraday trading to assess potential intermarket impacts. The Commission is considering rule amendments that would provide additional information on the trade register to improve the ability of the Commission to monitor various intermarket trading strategies.

The Commission has greatly enhanced its data processing capabilities in the past few years and has expedited some of its future enhancements to allow the Commission staff to keep up with the ever increasing workload and to be able to respond more adequately and quickly to market aberrations.

Question: What changes will enhance the CFTC's ability to monitor and enforce speculative limits?

Answer: Except for a limited number of agricultural commodities, the exchanges are responsible for setting speculative limits for their markets, enforcing compliance with such limits and reviewing and approving exemption requests from such limits. Nevertheless, the Commission is active in monitoring and enforcing speculative limits for all markets through daily review of large-trader position data, reviews of proposed exchange position limit rules to ensure that the limits are set at proper levels and through periodic audits of exchange compliance programs. The Commission recently developed extensive enhancements to its computer software to detect more promptly potential violations of combined futures and options position limits and to compare limit levels to the size of positions customarily held by traders on various contract markets. This new software takes specific account of each exchange's speculative limit rules for each futures and options contract to isolate potential violations.

A cornerstone of the Commission's efforts in this area is the audit of exchange compliance programs to determine their effectiveness in enforcement of speculative limits. In this area additional auditing capability will be needed as the number of active markets increase.

LEGISLATIVE OR REGULATORY CHANGES

Question: Chairman Gramm, when you testified before the Senate Banking Committee in late March, you said that you did not believe that legislative changes are needed to prevent another stock market disruption.

What measures do you believe should be taken? Would you accomplish your goals through regulatory changes?

Answer: I strongly believe that the best way to refine and improve market mechanisms is within the framework of the existing system. Sound statutory and regulatory systems are in place as they apply to the futures markets. Cooperation among the agencies, the exchanges and the market users is growing stronger every day and coordinated policy initiatives are becoming the rule rather than the exception. For example, CFTC recommendations have resulted in the enhancement of exchange financial protections, in particular clearing and settlement procedures. In addition, there has been improvement in information sharing among futures exchanges concerning financial risk of clearing members, and an intensified review of trading during the events of October to determine whether trading systems and procedures should be altered. When the Working Group on Financial Markets reports this month, I believe the Commission will have a better picture of what additional improvements may be called for.

Question: Have you proposed new regulations for CFTC? Do you plan to do so in the near future?

Answer: Thus far we have not found it necessary to propose any major new regulatory initiatives to deal with problems identified concerning the market break. The exchanges and their clearing organizations have made many improvements and refinements to their trading and capital rules, many of which were recommended by the Commission. Commission staff also is studying potential enhancements of trade data to provide for the identification of "program trading" transactions, which may result in the issuance of proposed rules. Further discussion and review of the October market break may result in other regulatory changes.

The Commission also is studying the issue of intermarket frontrunning. CFTC staff is considering whether a more specific futures industry standard should be devised to assure that intermarket trading abuses may be punished.

ENFORCEMENT PROGRAM

Question: The 1989 budget request includes an increase of ten staff years for the Western Region Office in Los Angeles. I am aware of the "Boiler Room" problems that have occurred in recent years in California. Does this increase reflect an attempt to eliminate these problems?

Answer: Yes. These additional staff will allow the Enforcement Division to attack the "Boiler Room" problem while also conducting an appropriate level of enforcement actions against Commission registrants, a significant percentage of whom are located in the Western United States.

Question: What type of problems will these staff be working on?

Answer: We anticipate that additional enforcement staff in the Western Regional Office will work on a variety of enforcement matters, including the illegal sale of off-exchange futures and options contracts by non-registrants, and fraud and other violations by registrants located in the Western United States.

Question: How will the staff levels in Los Angeles compare to other regional offices of CFTC, assuming this increase is approved?

Answer: Approval of the requested increase will provide the Commission with resources to bring the Western Regional Office enforcement staff to about the same levels as enforcement staffs in the New York and Chicago Regional Offices.

ADMINISTRATIVE MANAGEMENT AND SUPPORT

Question: Why is CFTC finding it difficult to recruit new personnel? In what specific programs has this been most difficult?

Answer: The Commission employs primarily lawyers, economists, auditors, and futures trading investigators. Many of these positions require advanced degrees or further professional training. As this subcommittee is aware, futures trading is a specialized field and one that is largely not understood by the general public. With the tremendous growth in the volume and diversity of contracts traded, there is a great demand for trained professionals by the exchanges, brokerage firms and law firms, particularly in cities where our offices are located. All of these factors make it difficult for the Commission to attract experienced people for these positions or to retain newer employees once they do learn about futures. Federal salaries for economists, attorneys and auditors are low relative to the private sector and we even find ourselves unable to compete with non-profit organizations such as universities for economists with advanced degrees.

To attract new professionals, we have tried a variety of recruiting techniques. We have worked with the Office of Personnel Management to recruit graduates directly from colleges and we have attended university recruiting programs and job fairs. We are advertising the availability of positions in a variety of business and professional publications in addition to the standard Federal sources. We have attended seminars and made presentations at professional meetings where we encourage attendees to explore career opportunities with the Commission. We also are arranging cooperative education agreements with some colleges and universities to give students a chance to work at the CFTC before they complete all of their formal education. We take advantage of OPM's student work programs and hire students and graduate students in the summer and participate in certain work/school programs. On the whole, we are finding these techniques to be quite successful.

ENFORCEMENT PROGRAM

Question: The budget justification notes that civil money penalties of over $1,800,000 assessment were made last year. To whom are these funds distributed? Have all of these funds been distributed?

Answer: All civil money penalties as well as all fees collected by the Commission are deposited into the General Revenue Fund of the United States Treasury.

CONTRACT MARKETS AND REGISTERED FUTURES ASSOCIATION

Question: What type of "targeted reviews" are planned for 1989? What type of reviews were conducted in 1988?

Answer: The Commission staff regularly reviews selected trading to detect suspicious activity. Upon detection, this activity generally is referred to the exchanges for further investigation and, in appropriate cases, to the Commission's Division of Enforcement. Targeted reviews of trading focus upon a wide spectrum of customer and noncompetitive trading abuses. During FY 1987 the staff completed in excess of 50 such targeted reviews. This program has proved to be an effective tool for assessing the quality of exchange compliance activity and for encouraging exchange attention to their compliance responsibilities. A comparable number of reviews is planned for FY 1989.

Question: How do the oversight functions of the contract markets program differ from those of the market surveillance, analysis and research program?

Answer: The contract markets staff conducts oversight of exchange self-regulatory programs relative to market surveillance, trade practice surveillance and disciplinary programs. Exchange market surveillance programs are designed to assure that transactions are being priced competitively, free of possible manipulation. Exchange trade practice surveillance programs are designed to detect and prosecute trading abuses. Exchange disciplinary programs must ensure that violations of exchange rules discovered in market and trade practice surveillance programs are sanctioned adequately.

The Commission's oversight of these self-regulatory programs assures that they are effective and comprehensive. Such oversight includes formal reviews assessing the adequacy of these programs and making recommendations for improvements. These reviews are made public upon completion. Our oversight also includes review of proposed exchange and clearing organization rule changes for consistency with the Commodity Exchange Act, Commission regulations, and the public interest. These two primary methods of oversight are supplemented by limited direct review of exchange trading activities which results in referrals to the exchanges or the Division of Enforcement and, in certain cases, forms the basis for publication of special studies on industry practices and particular market events.

In contrast, the Commission's market surveillance program conducts direct surveillance of the futures markets. Although the exchanges, as self-regulators, are required to monitor trading activity in their individual markets, because of the importance and fast moving nature of futures trading, the Commission cannot rely on after-the-fact oversight alone to ensure that all the various markets trade in a fair and orderly manner. Thus, the Commission maintains a strong and independent ability to gather and analyze pertinent information regarding trading in all futures and option markets, enabling the Commission to keep abreast of ongoing market conditions and related exchange actions.

The market analysis program allows the Commission to examine critically exchange applications for designation as contract markets, submissions requesting Commission approval of amendments to exchange rules, and the adequacy of the terms and conditions of existing futures and options contracts. By overseeing exchange efforts in these areas, the Commission ensures that all futures and option instruments being traded are kept up-to-date and consistent with cash-market practices. The research program provides the

Commission with in-depth economic analysis of significant regulatory issues involving particular contract markets and the trading of futures and options.

INDUSTRY SELF-REGULATION

Question: How well do you believe efforts to self-regulate the exchanges is being accomplished? Where are the problem areas and how are you working to resolve them?

Answer: The Commission believes that self-regulatory efforts by the exchanges are substantial, as reflected by the ever-increasing amount of money and staff dedicated by exchanges and the NFA to their compliance activities. The exchanges' commitment to self-regulation has resulted in more sophisticated means of trade, market, and financial surveillance, and a resulting increase in the number and magnitude of sanctions imposed for exchange rule violations. The exchanges have made significant progress in improving available transaction data as part of their implementation of the Commission's recently enhanced audit trail requirement. The exchanges also are refining and developing computer-assisted trade practice surveillance systems to use that improved data more effectively. The exchanges continue to augment their financial surveillance systems through use of more sophisticated programs for assessing risk and the exchange of firm-related financial information. Similarly the NFA has developed sophisticated systems for fulfilling its self-regulatory mission of enforcing industry sales practice standards and the registration of industry professionals.

The Commission is working with the exchanges in its oversight role to assure that they continue to make appropriate improvements in these programs. In particular, the Commission is monitoring implementation of the recommendations reflected in the staff's Final Report and Financial Followup Report on the October market break for enhancements in market surveillance and financial self-regulatory programs and for exchange of information among futures and securities exchanges regarding possible intermarket abuses.

FOOD AND DRUG ADMINISTRATION

STATEMENT OF DR. FRANK E. YOUNG, COMMISSIONER

ACCOMPANIED BY:
JOHN NORRIS, DEPUTY COMMISSIONER
THOMAS SCARLETT, CHIEF COUNSEL
SHARON SMITH HOLSTON, ACTING ASSOCIATE COMMISSIONER FOR MANAGEMENT AND OPERATIONS
FRANK P. CLAUNTS, DIRECTOR, DIVISION OF FINANCIAL MANAGEMENT

OPENING REMARKS

Senator Burdick. Our next panel will deal with the Food and Drug Administration. Dr. Young, will you proceed?

Dr. Young. Thank you, Mr. Chairman. If it meets with your approval, I would like to focus my testimony on the budget, per se, to illustrate it with a few graphs that might clarify the issues, and submit my full testimony for the record.

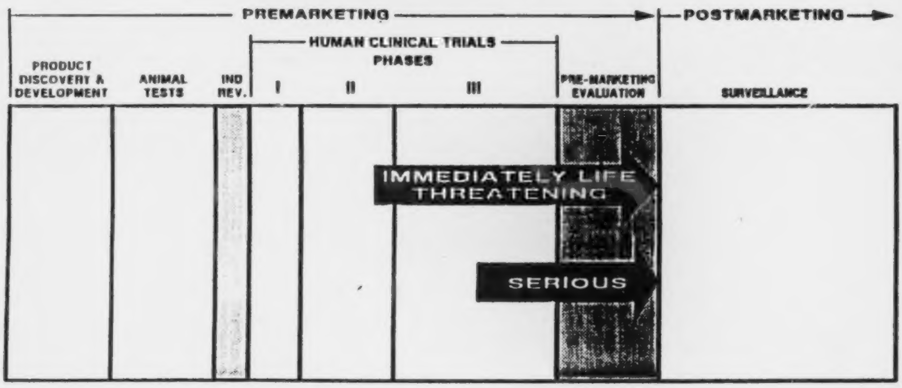
Senator Burdick. It will be so received.

AIDS

Dr. Young. Thank you very much, Mr. Chairman. The most important issue facing the Food and Drug Administration, but more critically facing the American public and the world, is the crisis of AIDS. We have seen a dramatic development of a new disease, first recognized in 1981, which has stricken, at this time, in excess of 50,000 people and is projected to increase to over 270,000 victims by the year 1991.

This disease has devastated some of our younger population, and it is one which demands the utmost interaction on the part of the federal government. The FDA's role is in the development and evaluation of drugs and biologics. If I could have the first of the graphs, please, I will illustrate the process by which drugs are developed in the United States.

DRUG DEVELOPMENT PROCESS: TREATMENT USE



The portions that are in orange are those that are done by the sponsor, and the vertical lines in blue are the activities where the Food and Drug Administration commences. The first work in the development of drugs for AIDS is the discovery of the product followed by animal tests. The drug or vaccine or biologic is then submitted to the Food and Drug Administration to determine whether there is sufficient safety for the trial to go forward.

If that is judged to be the case, the drug or biologic is administered to individuals, usually 10 to 30, in the first phase. Following a safety examination, it moves into phase II, where a few hundred individuals may be administered the drug.

It is important to note that approximately 90 percent of all drugs started will not be found to be successful after phase II. The remaining drugs are studied for evaluation in the form of verification in phase III. Those that survive successfully with safety and effectiveness are submitted to the Food and Drug Administration for evaluation as a new drug application.

AIDS APPLICATIONS

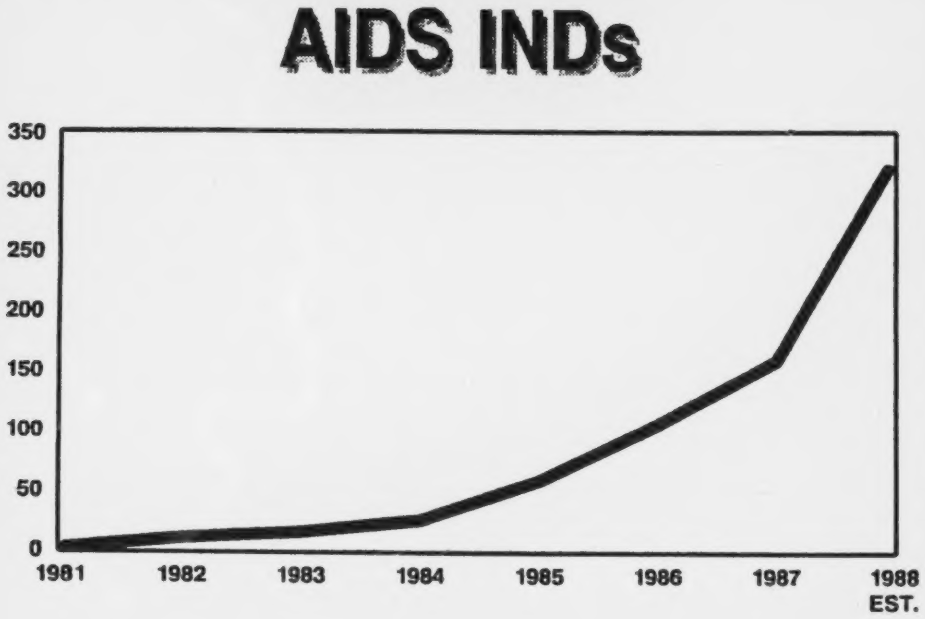
We have promised the American people that we will evaluate all AIDS-related drugs and biologic products within 180 days. That is approximately one-fourth of the time that it takes to evaluate all other drugs. I am pleased that evaluation of the drug AZT was completed in 107 days, the fastest evaluation in the history of the Food and Drug Administration.

We have just last year promulgated a new regulation to help bring drugs to desperately ill people, the treatment IND. Because we know a great deal about the drugs after completion of phase II, we suggested that it would be possible to have drugs approved for immediate use in life-threatening situations if there is sufficient evidence of effectiveness and safety.

I am pleased to inform you that a drug, Trimetrexate, was recently approved for treatment for Pneumocystis Carinii Pneumonia in individuals who are not able to tolerate other drugs, and it is the first of such treatment IND's submitted. It is a less burdensome approval process. AZT, in its application, was 20 linear feet. The number of pages for the drug that was just approved as a treatment IND, was far less than 100 pages. The treatment IND is designed to bring drugs to desperately ill people when there is no alternative therapy.

AIDS DRUGS

The next graph shows the development of AIDS drugs within the United States. I am pleased to inform you that the excellent work stimulated by the National Institutes of Health and also by the private sector has resulted in a marked increase in the investigation of new drugs being tried in individuals over this period of time.



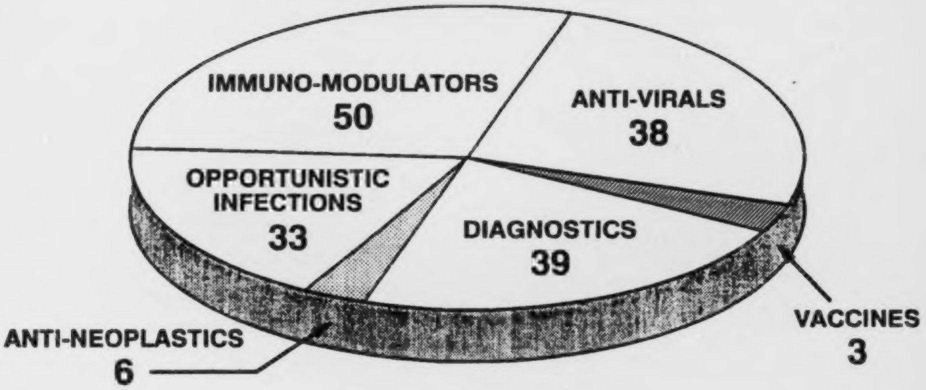
You may recall that in 1981, AIDS was not present within our land as identified by the medical community, and thus, there was a lag in the development of drugs until 1984; where you then see the marked increase in the number of investigational products.

The next graph shows where these increases are in the type of products that are submitted to the Food and Drug Administration. Of these, the largest number, 47, are those that modify the immune system. Another number, 38, are for antivirals. I must hasten to add that antivirals are very difficult to develop. Only seven have been approved in the history of FDA in contrast to hundreds and hundreds of antibacterial drugs. You see other drugs that are listed there, as well.

AIDS INDs

TOTAL = 169

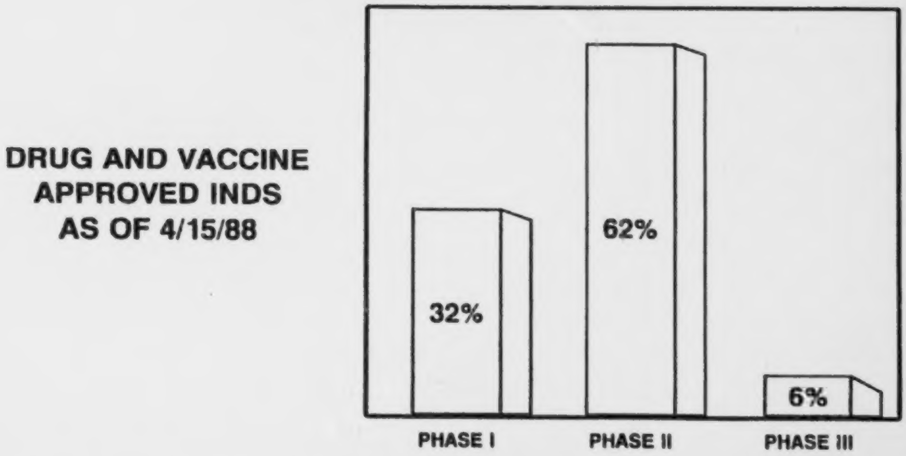
Active as of Apr. 15, 1988



The next graph shows where they are relative to the first plot. Would you please put the first graph up again for me? I would like to recall the phases. You will notice there are three phases. The third phase is the last one before the evaluation process.

APPROVED AIDS INDS

BY TESTING PHASE



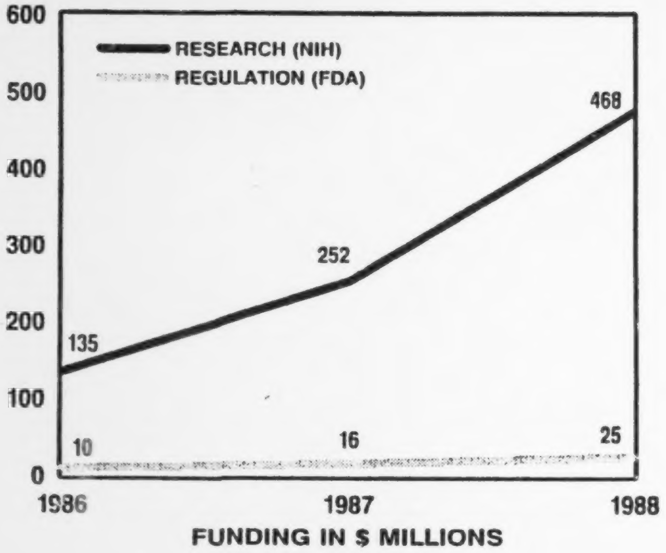
In this process of development, right now, 61 percent are in phase II and 6 percent are in phase III. This holds at least a promise that if there are effective drugs, we will see increasing numbers of treatment

IND's coming forward in this year and the next to help individuals who are desperately affected.

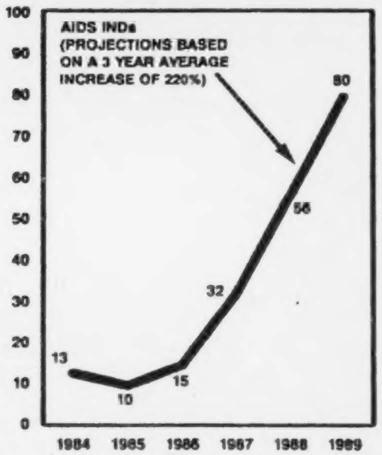
Our largest budget concern is for personnel to evaluate these. I must say that it is extraordinarily intense in FDA at this time because no new drug, no new biologic, no new vaccine can reach the American people without review by FDA.

We have seen a 200-fold increase in the number of applications coming in during this time period. The next graph shows the relative increases in types of funding.

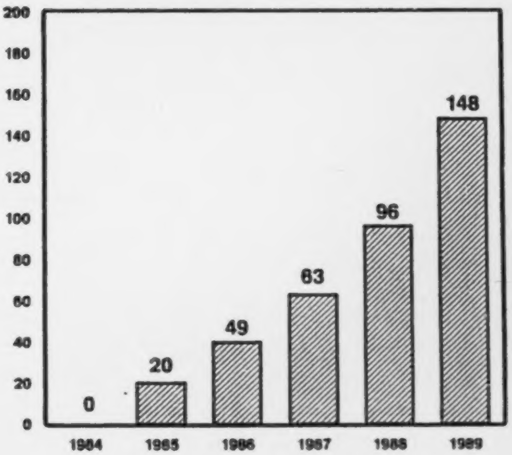
AIDS RESEARCH AND REGULATORY FUNDING



The problem facing the Food and Drug Administration is clearly shown by this graph. It is not designed in any way to be an invidious comparison, but instead to point out the relative fundings that are occurring in the research communities and the regulatory communities.



BIOLOGICS AIDS INDs RECEIVED PER YEAR



FTEs DEVOTED TO BIOLOGICS AIDS ACTIVITIES

The research that is funded by the federal government is less than 50 percent of that which is funded by the private sector. For example, where we have approximately 15 products for AIDS, 11 of the 15 are being developed by the private sector and 4 of the 15 by NIH-sponsored grants.

AIDS APPLICATIONS

The only reliable numbers that I have are the dollars in research. My deep concern is that the people and the facilities to review these applications are present at the time the applications come in.

To do so will bring the products to the American people. To fail to do so would put a block in the conduit from research to the public. When FDA approved AZT in 107 days, we displaced approximately 60 people from their usual activities and assigned them to the review of AZT. Usually, the team is about eight people. We had in excess of 60 people working 107 days to deal with that.

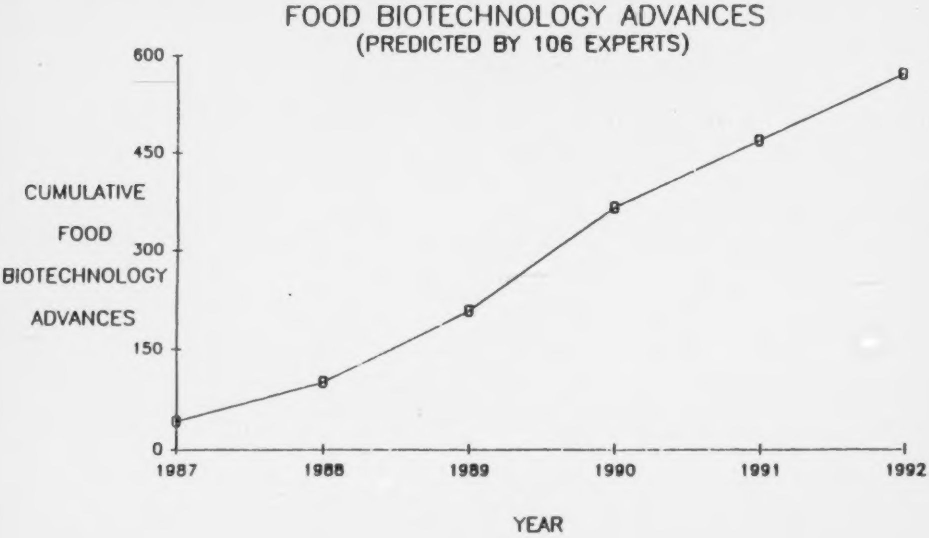
If the crush of these drugs rises, without the proper number of personnel, I can guarantee you that FDA will be a bottleneck. Therefore, I am pleased to inform you that the administration has requested 127 full-time equivalents to deal with the AIDS program. The Presidential commission, recognizing this need, has generated a report urging even stronger action in the future in this vein.

AIDS FACILITIES

The facilities are essential, as well. It is impossible for us to house people in the buildings that we have. We are already more than 100 over the recommended level in biologics alone, and we need individual spaces for people in drug review, as well.

AIDS REGULATORY FUNCTION

The next graph shows a breakdown of this regulatory function. A function which is less than 3 percent of the federal funding of the research and the relative increase that have occurred over this period of time. In the 3-year average, there has been a 220-percent increase in the number of IND's, and though we are increasing in FTE's, the rate of increase in FTE's is falling behind the rate of increase in applications coming in.

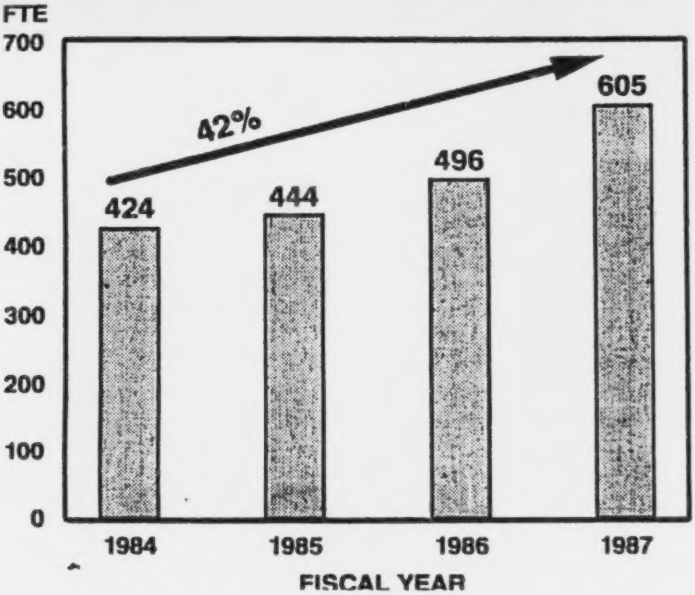


I call this to your attention primarily to strongly urge your support of both the facilities and the space. There is another interesting factor that I would like to show you in relation to the general field of biotechnology which enters into the solution of these problems.

FOOD BIOTECHNOLOGY

I had the privilege of chairing the United States Delegation to Paris on this issue, and we were able to determine that there will be a marked increase in food biotechnology advances and the Food and Drug Administration needs to be prepared for this as well. I would like to submit for the record the background information that gives rise to this assessment.

INCREASE IN IMPORT FTEs



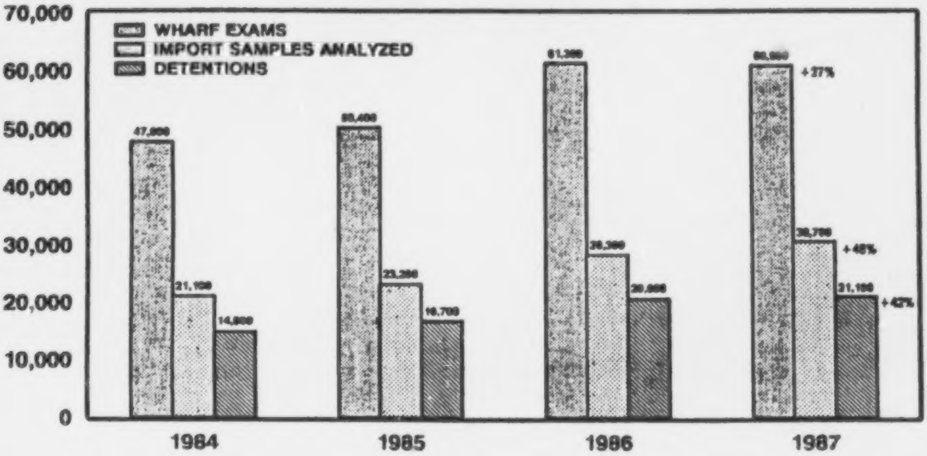
FOOD SAFETY

The next area that I would like to focus on is the problem of food surveillance. We have in the United States an increasing problem with having a level playing field. We have products that are produced in various parts of the world that come into the United States without the manufacturing and regulatory standards that we have. Accordingly, we have reallocated, in the last few years, funds from our existing budget to deal with imports.

We have increased by 42 percent, through internal reallocation, our focus on imports. You can see the number of full-time equivalents that we have rebudgeted each year to try to make a level playing field. That increase has paid off. If I could have the next graph, please.

FDA IMPORT ACTIVITIES

1984 - 1987



We have increased in these years by 27 percent our wharf examinations. We cannot do good manufacturing practice inspections on firms overseas. We must examine the products as they come into the country. We have similarly increased, by approximately 45 percent, the import samples analyzed, and our detentions over this period of time have increased by 42 percent.

But the Administration feels very strongly that now, having reallocated resources internally, that we need additional resources. We have requested 41 FTE's and the appropriate money for your consideration to augment this problem to assure that our nation has as level a playing field and as fair a system as possible. We submit this request for your consideration and trust that it might be supported, as I know that Congress is very concerned about competition and fairness between domestic and foreign produced products.

DEVICE APPROVAL

We finally have focused on the area of improving our device approval, and I am pleased to inform you that at the end of the last fiscal year, we were able to reduce the backlog to zero in all five major categories of applications. The workload is continuing to grow, and we have submitted for your consideration a request for 18 new full-time equivalents for device review, and to continue our efforts on drug review, a request for 16 full-time equivalents here.

BUDGET REQUEST

Save the AIDS budget, this is a modest increase, sir. This is only a 3.5-percent increase in dollars and a little over 2 percent in full-time equivalents. We feel these are desperately needed to meet the concerns of the United States as related to the Food and Drug Administration's responsibility to oversee 570 billion dollars' worth of commerce within the United States.

Mr. Chairman, I thank you for the privilege of allowing me to use the illustrations, and I hope that they were helpful rather than reading the testimony for you. I would be delighted to answer any questions that I could. Thank you, sir.

PREPARED STATEMENT

Senator BURDICK. Thank you, Dr. Young. We have your complete statement and it will be made part of the record.

[The statement follows:]

Statement of Dr. Frank E. Young

MR. CHAIRMAN, I AM PLEASED TO HAVE THE OPPORTUNITY TO APPEAR BEFORE YOUR SUBCOMMITTEE TODAY TO SUPPORT THE FOOD AND DRUG ADMINISTRATION'S BUDGET REQUEST FOR 1989. I WOULD FIRST LIKE TO INTRODUCE MY COLLEAGUES AT THE TABLE WITH ME....OTHER MEMBERS OF MY STAFF ARE ALSO PRESENT TO RESPOND, IF NECESSARY, TO SPECIFIC QUESTIONS AND INTERESTS OF THE COMMITTEE.

THIS PAST YEAR HAS BEEN ONE OF BOTH CHALLENGE AND ACCOMPLISHMENT FOR FDA. DURING THE COURSE OF THE YEAR THE AGENCY STRENGTHENED ITS EMPHASIS ON PROBLEMS WITH IMPORTED FOODS, AND CONTINUED TO FOCUS RESOURCES ON DEVELOPING THERAPIES FOR PEOPLE WITH AIDS. AT THE SAME TIME THE AGENCY HAS MADE SUBSTANTIAL HEADWAY IN ITS REVIEW OF NEW DRUGS, GENERIC DRUGS, AND MEDICAL DEVICES.

FDA'S RESPONSIBILITIES ARE MONUMENTAL. PRODUCTS THE AGENCY MUST ASSURE ARE SAFE INCLUDE FOODS, DRUGS, MEDICAL DEVICES, VACCINES, BLOOD PRODUCTS, RADIOLOGICAL PRODUCTS, VETERINARY DRUGS, AND COSMETICS. IN THE VAST ARENA OF DEVELOPING AND APPLIED TECHNOLOGY, WE ARE THE VITAL CONDUIT BETWEEN DISCOVERY AND THE INTRODUCTION OF PRODUCTS TO THE CONSUMER. THUS WE HAVE A PARTICULARLY BROAD MANDATE, WHICH ALSO REQUIRES US TO BE INVOLVED IN EDUCATING CONSUMERS ABOUT THE SAFETY OF THE PRODUCTS WE REGULATE SO THAT THEY CAN PARTICIPATE IN PROTECTING THEIR OWN HEALTH. FDA IS RESPONSIBLE FOR INSPECTING AND MONITORING THE OUTPUT OF SOME 90,000 FIRMS AND HAS RESPONSIBILITY FOR PRODUCTS REPRESENTING MORE THAN $550 BILLION PER YEAR. DURING FY 1987, FDA MADE REVIEW DECISIONS ON APPROXIMATELY 15,000 PRODUCT APPLICATIONS. CRUCIAL TO THIS WIDE RANGE OF RESPONSIBILITIES IS A SOUND SCIENCE BASE THAT IS ESSENTIAL TO OUR REGULATORY MISSION. ADDITIONALLY, FDA SCIENTISTS PREPARED SOME 850 SCIENTIFIC ARTICLES FOR PUBLICATION IN FY 1987. MR. CHAIRMAN, WE ARE FORTUNATE THAT YOU AND OTHER MEMBERS OF THE COMMITTEE RECOGNIZE THE IMPORTANCE OF OUR TASK, AND

IT IS IN LARGE PART DUE TO YOUR SUPPORT THAT WE HAVE BEEN ABLE TO ENSURE THE PUBLIC SAFETY IN A MOST CHALLENGING YEAR.

OUR ACTION PLAN PROCESS, WHICH I INITIATED SHORTLY AFTER I CAME TO FDA, HAS BEEN A CRUCIAL TOOL IN MANAGING THE AGENCY DURING THIS PERIOD. DURING 1987, FDA VIRTUALLY COMPLETED ACTION PLAN PHASE I AND BEGAN IMPLEMENTING AN EVEN MORE COMPREHENSIVE SET OF GOALS UNDER ACTION PLAN PHASE II. TO DATE WE HAVE COMPLETED 95 PERCENT OF THE MILESTONES OF OUR ORIGINAL ACTION PLAN. THE SUBSTANTIVE RESULTS OF THIS EFFORT CAN BE SEEN IN EVERY AREA OF AGENCY ACTIVITIES INCLUDED IN THE PLAN. UNDER THE SECOND PHASE OF FDA'S UPDATED ACTION PLAN, WE HAVE ALREADY STARTED 89 PERCENT OF THE 457 MILESTONES AND HAVE COMPLETED 49 PERCENT.

IN ORDER TO PLACE OUR BUDGET REQUEST IN PERSPECTIVE, I WOULD LIKE TO REVIEW BRIEFLY THE DEMANDS ON THE AGENCY AND OUR ACCOMPLISHMENTS IN RESPONSE TO THOSE DEMANDS. I WILL DISCUSS OUR ACTIVITIES UNDER THE FOLLOWING FOUR BROAD HEADINGS:

- AIDS
- FOOD SAFETY
- NEW PRODUCT EVALUATION
- FIELD ACTIVITIES

THEN I WILL GIVE YOU A VERY BRIEF SUMMARY OF OUR BUDGET REQUEST.

AIDS

THE CHALLENGES FACING ALL OF US IN THE MONTHS AHEAD THAT ARE POSED BY AIDS ARE TREMENDOUS. THE FOOD AND DRUG ADMINISTRATION SERVES AS A CRUCIAL LINK IN EFFORTS TO TRANSFER AIDS RESEARCH INTO THERAPY, VACCINES, AND IMPROVED BLOOD TESTING FOR AIDS PATIENTS, AND THE GENERAL PUBLIC AS WELL. THE AGENCY IS CHALLENGED TO ENSURE THAT SUFFICIENT CAPABILITY TO OVERSEE THE TESTING OF NEW

AIDS THERAPIES AND THE EVENTUAL APPROVAL OF THOSE THAT PROVE EFFECTIVE KEEPS PACE WITH THE RAPID GROWTH OF THE RESEARCH. AS THE 1989 BUDGET FOR THE CONSOLIDATED PHS ACCOUNT REFLECTS, WE ARE REQUESTING MANY MORE PEOPLE TO KEEP UP WITH THE WORK, AND A NEW BUILDING IS PROPOSED TO HOUSE THE CRITICAL LABORATORY WORK WE MUST CONDUCT TO MAKE LIFE-OR-DEATH SCIENTIFIC DECISIONS. WE WILL NOT ALLOW A LACK OF STAFF OR ESPECIALLY OF SPACE TO IMPEDE OUR EFFORTS IN THIS BATTLE.

AS EXAMPLES OF OUR RECENT ACCOMPLISHMENTS ON AIDS, FDA HAS (1) REVIEWED AND APPROVED IN THREE AND A HALF MONTHS THE FIRST DRUG TO TREAT AIDS PATIENTS (ZIDOVUDINE, FORMERLY CALLED AZT); (2) APPROVED THE FIRST TREATMENT IND FOR AIDS-RELATED OPPORTUNISTIC INFECTIONS; (3) LICENSED THE WESTERN BLOT CONFIRMATORY AIDS ANTIBODY TEST FOR USE IN BLOOD SCREENING; (4) DOUBLED OUR FIELD SURVEILLANCE OF BLOOD BANKS AND FOCUSED CONTINUED ATTENTION ON QUALITY ASSURANCE OF BLOOD AND PLASMA CENTERS; (5) APPROVED THE FIRST AIDS VACCINE FOR CLINICAL TESTING; (6) APPROVED 92 INVESTIGATIONAL PROTOCOLS FOR HUMAN TESTING OF SOME 40 DIFFERENT AIDS DRUGS AND BIOLOGICALS; (7) INITIATED RIGOROUS SURVEILLANCE AND TESTING PROGRAMS TO ENSURE THE QUALITY OF CONDOMS AND SURGICAL GLOVES FOR USE IN THE PREVENTION OF AIDS TRANSMISSION; (8) INITIATED SEVERAL AVENUES OF AIDS RESEARCH AIMED AT STUDYING HOW THE AIDS VIRUS AFFECTS THE IMMUNE SYSTEM AND INFECTS HUMANS.

IN ADDITION TO THE FOREGOING, FDA HAS IMPLEMENTED SEVERAL MANAGEMENT INITIATIVES TO ASSURE THAT AIDS PRODUCTS RECEIVE THE HIGHEST PRIORITY. THE CENTER FOR DRUGS AND BIOLOGICS HAS BEEN SPLIT RECENTLY INTO THE CENTER FOR DRUG EVALUATION AND RESEARCH AND THE CENTER FOR BIOLOGICS EVALUATION AND RESEARCH. WITHIN THE CENTER FOR DRUG EVALUATION AND RESEARCH, A NEW DIVISION OF ANTI-VIRAL DRUGS HAS BEEN CREATED WHICH WILL CONCENTRATE ON REVIEWING THE NEW THERAPIES BEING DEVELOPED TO COMBAT THE HIV VIRUS. WITHIN THE CENTER FOR BIOLOGICS EVALUATION AND RESEARCH, WE ARE

CREATING A NEW DIVISION OF CYTOKINE BIOLOGY, CONTAINING SEVERAL LABORATORIES DEVOTED TO IN-DEPTH STUDY OF CELL BIOLOGY, IMMUNOLOGY AND OTHER POSSIBLE KEYS TO UNDERSTANDING THIS DEADLY VIRUS.

FDA'S EFFORTS TO DEAL WITH AIDS ARE JUST ONE PART OF A MASSIVE PUBLIC HEALTH SERVICE EFFORT WHICH INVOLVES ALL OF THE MAJOR PHS AGENCIES. FOR EXAMPLE, FDA WORKS CLOSELY WITH NIH IN PROMOTING AND MONITORING DEVELOPMENT OF PRODUCTS TO TREAT OR PREVENT AIDS; WITH THE CENTERS FOR DISEASE CONTROL IN MONITORING THE RESULTS OF SCREENING TESTS FOR AIDS AND IN OTHER PREVENTION AND EDUCATIONAL EFFORTS; AND FINALLY, WITH THE ALCOHOL DRUG ABUSE AND MENTAL HEALTH ADMINISTRATION IN EFFORTS TO REDUCE DRUG ABUSE THROUGH THE METHADONE TREATMENT REGULATIONS.

IN FACT, THE OVERALL PHS EFFORT AGAINST AIDS IS PROPOSED AT A LEVEL OF $1.3 BILLION IN 1989, A 37 PERCENT INCREASE OVER THE 1988 LEVEL. TO ENSURE EFFECTIVE COORDINATION AND MANAGEMENT OF THESE EFFORTS, THE ADMINISTRATION IS PROPOSING A CONSOLIDATED ACCOUNT FOR THESE ACTIVITIES UNDER THE DIRECTION OF THE ASSISTANT SECRETARY FOR HEALTH. FUNDING FROM THIS ACCOUNT WILL BE DISTRIBUTED TO THE OPERATING AGENCIES, AND CURRENT PLANS ARE THAT ABOUT $40 MILLION WILL BE USED TO EXPAND FDA'S PROGRAMS DIRECTED TOWARD AIDS, INCLUDING A TOTAL STAFFING LEVEL OF 254 FTES FOR THIS WORK. ALSO, ANOTHER $25 MILLION FROM THIS ACCOUNT WILL BE USED TO EXPAND OUR FACILITIES LOCATED AT THE NIH CAMPUS TO PROVIDE THE ESSENTIAL LABORATORY CAPABILITY NEEDED FOR OUR SCIENTISTS WORKING ON AIDS. THESE EXPANDED RESEARCH AND PRODUCT REVIEW ACTIVITIES, COMBINED WITH ENHANCED LABORATORY FACILITIES, WILL ASSURE THAT FDA CAN CONTINUE TO PLAY A MAJOR ROLE IN THE RAPIDLY EXPANDING NATIONAL EFFORT AGAINST THIS TERRIBLE DISEASE. THE ADDED FLEXIBILITY AND COORDINATION POSSIBLE WITH THE CONSOLIDATED FUNDING APPROACH WILL ENHANCE THE COMBINED PUBLIC HEALTH SERVICE RESEARCH, EDUCATION, AND PREVENTION PROGRAMS. FURTHERMORE, IT SHOULD PROVIDE

FLEXIBILITY AS THE NEED FOR ADDITIONAL EFFORT IS DIFFICULT TO PREDICT.

FDA HAS A VITAL ROLE IN THE NATION'S EFFORT TO COMBAT AIDS. THIS IS DUE NOT ONLY TO ITS REGULATORY ACTIVITY BUT TO ITS KNOWLEDGE AND EXPERIENCE IN DISEASE THERAPY BY DRUGS, DISEASE PREVENTION BY BIOLOGICAL VACCINES, AND REGULATION OF BLOOD AND BLOOD PRODUCTS. INCREASED ACTIVITIES BY INDUSTRY, ACADEMIA, AND GOVERNMENT TO DEVELOP DIAGNOSTICS, TREATMENTS, AND VACCINES FOR AIDS HAVE SIGNIFICANTLY INCREASED THE NUMBER OF PRODUCT APPLICATIONS SUBMITTED FOR FDA EVALUATION AND LICENSING. TO DATE, FDA HAS RECEIVED OVER 190 INDs (NOTICES OF CLAIMED INVESTIGATIONAL EXEMPTION) REPRESENTING MORE THAN 127 PRODUCTS FOR AIDS OR AIDS-RELATED DISEASES.

TO SHOW YOU THE DRAMATIC INCREASE IN THESE APPLICATIONS, THE NUMBER OF INDS RECEIVED WAS 5 IN 1982, 3 IN 1983, 21 IN 1984, 31 IN 1985, 44 IN 1986, AND 60 IN 1987, AND WE HAVE ALREADY RECEIVED 26 IN 1988, FOR A TOTAL OF 190 INDS. OF THESE, 164 ARE ACTIVE INDs WITH 38 FOR ANTIVIRALS, 47 FOR IMMUNOMODULATORS, 32 FOR OPPORTUNISTIC INFECTIONS, 6 FOR ANTINEOPLASTICS, 38 FOR DIAGNOSTICS AND 3 FOR VACCINES. IN ADDITION TO THESE APPLICATIONS FOR CLINICAL STUDIES, WE THEN HAVE THE TASK OF CONSIDERING TREATMENT INDS SO THAT WHEN A DRUG SHOWS PROMISE WE CAN ALLOW ITS USE IN SERIOUSLY ILL PATIENTS BEFORE THE NDA IS APPROVED, AS WE DID FOR ZIDOVUDINE (AZT) AND JUST RECENTLY FOR TRIMETREXATE. I THINK YOU CAN SEE THIS IS A MULTI-FACETED ASSAULT ON AIDS ON MANY FRONTS.

IN ADDITION TO PRODUCT APPLICATION REVIEWS AND LICENSING, FDA MUST LICENSE MANUFACTURING ESTABLISHMENTS, CERTIFY MANUFACTURED BATCHES, AND DEVELOP STANDARDS, REFERENCE SERA, METHODOLOGIES, AND VALIDATION AND TESTING STRATEGIES. FDA WILL CONTINUE TO EXPAND THE SCOPE OF ITS AIDS-RELATED ACTIVITIES AS NEW DATA ON THE AIDS

VIRUS AND DISEASE ACCUMULATES AND CLINICAL TRIALS FOR AIDS THERAPY AND PREVENTION ESCALATE. WE ARE VERY CONCERNED THAT WE ARE ABLE TO MEET THE NEEDS THAT ARE MOUNTING IN THE REVIEW OF NEW DIAGNOSTICS, DRUGS, AND VACCINES. FORTUNATELY, THE FRUITS OF THE RESEARCH EFFORTS BY THE PUBLIC AND PRIVATE SECTOR HAVE BEEN GREATER THAN ANTICIPATED, BUT THEY HAVE PRODUCED STRESS ON THE AGENCY'S CAPACITY TO CONTINUE TO REACT PROMPTLY.

FDA'S STRONG COMMITMENT TO THE WAR AGAINST AIDS IS ILLUSTRATED BY ITS TIMELY AND THOROUGH PREMARKET REVIEW OF THE DRUG ZIDOVUDINE, FORMERLY KNOWN AS AZIDOTHYMIDINE OR AZT. ON MARCH 19, 1987, THIS DRUG BECAME THE FIRST AIDS DRUG TO RECEIVE FDA APPROVAL. APPROVAL WAS GRANTED IN RECORD TIME - 107 DAYS AFTER RECEIPT OF A TWENTY FOOT HIGH STACK OF PAPER CONSTITUTING ITS NEW DRUG APPLICATION. ZIDOVUDINE IS THE FIRST DRUG TO GO COMPLETELY THROUGH THE 1-AA DESIGNATION PROCESS, WHICH WAS CREATED LAST YEAR TO ASSURE THAT ALL POTENTIAL AIDS AND AIDS-RELATED THERAPIES RECEIVE THE ABSOLUTE TOP PRIORITY IN THE NEW DRUG REVIEW PROCESS.

ON AUGUST 18, FDA GRANTED PERMISSION FOR THE FIRST OF THREE CLINICAL STUDIES IN HUMANS OF AN EXPERIMENTAL AIDS VACCINE. THIS IS AN IMPORTANT STEP IN THE DEVELOPMENT OF A VACCINE THAT MAY BE EFFECTIVE IN PROTECTING PEOPLE FROM INFECTION BY THE AIDS VIRUS. THE VACCINE CONSISTS OF PURIFIED PROTEIN FROM THE GENETIC MATERIAL OF THE HUMAN IMMUNODEFICIENCY VIRUS (HIV) AND WAS DEVELOPED USING TECHNIQUES SIMILAR TO THOSE EMPLOYED IN THE MANUFACTURE OF OTHER RECOMBINANT VACCINES. CURRENTLY, FDA IS ACTIVELY REVIEWING SEVERAL ADDITIONAL INVESTIGATIONAL APPLICATIONS FROM SPONSORS SEEKING PERMISSION TO BEGIN CLINICAL TESTING OF AIDS VACCINES IN HUMANS.

RECOGNIZING THAT THERE ARE TIMES WHEN A NEW EXPERIMENTAL DRUG HOLDS THE PROMISE OF HOPE FOR DESPERATELY ILL PATIENTS, IT SEEMED IMPERATIVE THAT THESE PATIENTS BE ALLOWED ACCESS TO THOSE DRUGS

ONCE A REASONABLE BODY OF DATA EXISTS. THUS, FORMAL PROVISION WAS BUILT INTO THE FDA REGULATIONS WHICH PERMITTED EXPANDED USE OF EXPERIMENTAL DRUGS UPON MEETING SPECIFIC CRITERIA DEVELOPED TO DETERMINE APPROPRIATENESS. THE DRUG, ZIDOVUDINE, SERVED AS A MODEL FOR THESE NEW REGULATIONS AND JUST RECENTLY, THE DRUG TRIMETREXATE, DEVELOPED AS A TREATMENT FOR AIDS PATIENTS WITH PNEUMOCYSTIS CARINII PNEUMONIA WHO CANNOT TAKE APPROVED THERAPIES BECAUSE OF SERIOUS ADVERSE REACTIONS, WAS APPROVED AS A TREATMENT IND.

FDA IS ACTIVELY INVOLVED IN CONDUCTING ITS OWN RESEARCH ON A NUMBER OF TOPICS RELATED TO AIDS WHICH IS VERY DIFFERENT FROM THE RESEARCH OF NIH. THIS RESEARCH, WHICH FOCUSES ON EFFORTS TO FACILITATE FDA'S REGULATORY ACTIONS, INCLUDES: (1) COMPARATIVE ANALYSES OF DIAGNOSTIC TESTS; (2) METHODS TO VALIDATE VACCINE SAFETY; (3) STUDIES OF THE BASIC IMMUNOLOGIC DEFECTS ASSOCIATED WITH THE DISEASE; AND (4) THE BIOLOGICAL AND CHEMICAL PROPERTIES OF NATURAL INTERFERONS AND THEIR ABILITY TO MODIFY THE IMMUNE SYSTEM. FDA'S RESEARCH ACTIVITIES PLAY A SIGNIFICANT ROLE IN THE DEVELOPMENT OF VACCINES, THERAPEUTIC AGENTS, AND TEST KITS FOR POSSIBLE USE IN AIDS AND AIDS-RELATED CONDITIONS BY DEFINING PARAMETERS THAT MUST BE MET BY ALL PRODUCTS REGARDLESS OF SPONSOR. IN ADDITION, WE ARE BEGINNING TO EXPLORE THE SIMILARITIES OF A BOVINE IMMUNODEFICIENCY-LIKE VIRUS TO THE AIDS VIRUS. THE CATTLE VIRUS IS SIMILAR ANTIGENICALLY AND APPEARS TO CREATE A DISEASE SYNDROME IN CATTLE WHICH RESEMBLES THE AIDS VIRUS SYNDROME. ADDITIONAL RESEARCH IS NEEDED TO EXPAND OUR KNOWLEDGE IN THIS AREA.

FDA'S VITAL ROLE IN THE AIDS BATTLE INCLUDES ENSURING THE SAFETY OF THE NATIONAL BLOOD SUPPLY. FDA IS INCREASING ITS INSPECTION OF BLOOD BANKS FROM ONCE EVERY TWO YEARS TO AN ANNUAL INSPECTION, AS IS CURRENTLY DONE FOR PLASMAPHERESIS CENTERS. MORE INSPECTIONS ARE NEEDED TO ASSURE THAT INCREASINGLY MORE SOPHISTICATED QUALITY

CONTROL AND RECORD KEEPING PROCEDURES ARE CAREFULLY OBSERVED. FDA ALSO CONDUCTS INSPECTIONS AND INVESTIGATIONS OF CLINICAL RESEARCH ACTIVITIES TO ASSURE THE INTEGRITY OF STUDIES SUBMITTED TO FDA FOR PRODUCT APPROVAL. AS THE NUMBER OF STUDIES INCREASE IN EFFORTS TO DEVELOP AND TEST NEW AIDS PRODUCTS, SO THE NUMBER OF INVESTIGATIONS WHICH MUST BE CONDUCTED INCREASE AS WELL. THESE ACTIVITIES, IN ADDITION TO TAKING ACTION AGAINST FRAUDULENT PRODUCTS PROMOTED FOR AIDS, ARE JUST PART OF THE IMPACT OF AIDS ON OUR FIELD ACTIVITIES.

FDA REGULATES FOUR TYPES OF AIDS-RELATED MEDICAL DEVICES: (1) BARRIER PRODUCTS, SUCH AS CONDOMS AND RUBBER GLOVES; (2) COMMONLY USED CLINICAL DEVICES THAT COULD TRANSMIT HIV IF NOT HANDLED PROPERLY, SUCH AS DENTAL DRILLS AND BRONCHOSCOPES; (3) MODIFIED CLINICAL DEVICES DESIGNED TO MINIMIZE RISK OF TRANSMISSION, SUCH AS "STICK-PROOF" NEEDLES; AND (4) DEVICES TO TREAT AIDS, SUCH AS BIOSTIMULATION DEVICES.

FOR CONDOMS, OUR PRIMARY GOAL HAS BEEN TO ASSURE ADEQUATE QUALITY OF THE PRODUCTS. WE HAVE INCREASED OUR INSPECTION OF MANUFACTURERS AND PROCESSORS, AND DEVELOPED A PROGRAM FOR TESTING BOTH DOMESTIC AND FOREIGN-MADE CONDOMS TO ENSURE CONFORMANCE WITH FDA'S CRITERIA FOR ACCEPTABILITY. SINCE IMPLEMENTATION OF THIS TESTING PROGRAM, FDA HAS TESTED OVER 102,000 CONDOMS FROM 530 BATCHES AND FOUND 11.5 PERCENT TO BE DEFECTIVE IN LEAKAGE TESTS OF DOMESTIC CONDOMS. THERE HAS BEEN A 24.1 PERCENT FAILURE RATE FROM FOREIGN BATCHES.

FOOD SAFETY

AS YOU KNOW, THE FDA HAS REGULATORY RESPONSIBILITY OVER THE SAFETY OF ALL FOOD AND FOOD PRODUCTS, INCLUDING FISH AND FISH PRODUCTS, WITH THE EXCEPTION OF MEAT, POULTRY, AND EGGS, WHICH ARE REGULATED BY THE UNITED STATES DEPARTMENT OF AGRICULTURE (USDA).

THROUGH OUR CENTER FOR VETERINARY MEDICINE, WE ARE ALSO RESPONSIBLE FOR REGULATING VETERINARY DRUGS USED IN FOOD-PRODUCING ANIMALS AND FOR THE SAFETY OF ANIMAL FEEDS. OVERALL, THE FOOD INDUSTRY REPRESENTS OVER $450 BILLION IN BUSINESS AND OBVIOUSLY AFFECTS THE HEALTH AND WELL-BEING OF EACH OF US EVERY DAY. AS A MICROBIOLOGIST, I HAVE BECOME ESPECIALLY CONCERNED IN RECENT YEARS ABOUT THE RISKS TO HEALTH POSED BY MICROBIAL CONTAMINATION OF FOODS, AND HAVE DIRECTED THAT RESEARCH AND PREVENTION EFFORTS OF THE FOOD AND DRUG ADMINISTRATION IN THIS AREA RECEIVE A HIGH AGENCY PRIORITY.

FDA'S FOOD SAFETY ACTIVITIES ARE VARIED AND COMPLEX IN NATURE. THEY ARE MULTIDISCIPLINARY, REQUIRING EXPERTS IN MICROBIOLOGY, CHEMISTRY, NUTRITION, TOXICOLOGY, STATISTICS, FOOD TECHNOLOGY, PATHOLOGY, EPIDEMIOLOGY, AND THE LAW. THEY ARE ALSO MULTI-ORGANIZATIONAL WITHIN FDA, REQUIRING THE EFFORTS NOT ONLY OF THE CENTER FOR FOOD SAFETY AND APPLIED NUTRITION AND A LARGE PART OF OUR FIELD FORCE, BUT ALSO THE EFFORTS OF THE CENTER FOR VETERINARY MEDICINE IN GUARDING AGAINST ILLEGAL DRUG RESIDUES IN MEAT AND CHEMICAL CONTAMINATION OF ANIMAL FEEDS, AS WELL AS THE EFFORTS OF THE NATIONAL CENTER FOR TOXICOLOGICAL RESEARCH. RISK ASSESSMENT IS AN EXAMPLE OF A MAJOR PROGRAM THAT CUTS ACROSS THESE ORGANIZATIONS. FDA'S FOOD SAFETY ACTIVITIES ALSO IMPACT ON, AND MUST BE COORDINATED WITH, A HOST OF OTHER ORGANIZATIONS AT THE LOCAL AND STATE LEVEL; OTHER FEDERAL AGENCIES, SUCH AS USDA, EPA, THE U.S. CUSTOMS SERVICE, AND CDC; AND FOREIGN GOVERNMENTS AND INTERNATIONAL ORGANIZATIONS.

FDA IS A SCIENTIFIC REGULATORY AGENCY. ITS REGULATORY ACTIVITIES ARE CLOSELY TIED TO ITS SCIENCE BASE AND RESEARCH ACTIVITIES. FDA'S ABILITY TO MAKE WIDELY ACCEPTABLE REGULATORY DECISIONS THAT LOWER THE BARRIERS TO INNOVATION WITHOUT COMPROMISING PUBLIC SAFETY DEPENDS DIRECTLY ON ITS HANDS-ON SCIENTIFIC EXPERIENCE IN METHODS DEVELOPMENT, HAZARD IDENTIFICATION, AND RISK ASSESSMENT.

FDA ALSO COMPLIMENTS ITS REGULATORY ACTIVITIES WITH EDUCATIONAL ACTIVITIES AIMED AT THE CONSUMER, INDUSTRY PERSONNEL, AND STATE OFFICIALS. FDA'S CONSUMER AFFAIRS OFFICERS AND THE SPECIALISTS IN OUR MILK, SHELLFISH, AND RETAIL FOOD PROTECTION PROGRAMS CONVEY LARGE AMOUNTS OF INFORMATION AND PROVIDE A GREAT DEAL OF TRAINING AND OTHER TECHNICAL ASSISTANCE TO ASSURE THE SAFETY OF THE FOOD SUPPLY, MULTIPLYING THE EFFECTIVENESS OF FEDERAL EFFORTS. TO AID IN YOUR REVIEW OF OUR PROGRAMS, WE WILL DISCUSS SOME OF THE HIGHLIGHTS SEPARATELY.

IMPORTED FOOD SURVEILLANCE

RECOGNIZING THE ALMOST THREE-FOLD INCREASE IN THE VOLUME OF CONSUMER PRODUCTS THAT ARE IMPORTED OVER THE LAST 15 YEARS, FDA HAS TAKEN A NUMBER OF INITIATIVES TO IMPROVE ITS SURVEILLANCE OVER IMPORTED FOODS, INCLUDING REPROGRAMMING RESOURCES TO IMPORTED FOOD COVERAGE. THUS THE RESOURCES WE HAVE DEVOTED TO IMPORTS HAVE INCREASED BY OVER 40% SINCE 1984. ALSO, THE AGENCY HAS INCREASED ITS USE OF DATA ANALYSIS TO CONCENTRATE COVERAGE ON TARGETED PRODUCT PROBLEM AREAS, SUCH AS CHEESE AND OTHER DAIRY PRODUCTS WHICH MAY BE CONTAMINATED WITH LISTERIA, AND SELECTED PRODUCE COMMODITIES WHICH MAY CONTAIN ILLEGAL PESTICIDES. FDA IS ALSO IMPLEMENTING A NATIONAL IMPORT DATA SYSTEM TO AUTOMATE PAPERWORK AND IMPROVE THE TRACKING OF VIOLATIVE SHIPMENTS AND SHIPPERS. THESE EFFORTS HAVE LED TO A 20 PERCENT INCREASE IN IMPORT DETENTIONS IN THE PAST THREE YEARS, BUT FDA IS STILL ABLE TO LOOK AT SAMPLES OF ONLY A RELATIVELY SMALL PERCENTAGE OF THE FOODS IMPORTED--ABOUT 10% OF ALL SHIPMENTS--AND THIS IS WHY AN INCREASE OF $2.8 MILLION INCLUDING 41 FTES IS REQUESTED FOR THIS PROGRAM. WITHOUT SUCH AN INCREASE, WE BELIEVE THAT WE COULD NOT CONTINUE TO ENSURE THE SAFETY OF BOTH IMPORTED AND DOMESTIC FOODS. ADDITIONALLY, WE WILL BE FOCUSING ON EMERGING PROBLEMS SUCH AS THE

SAFETY OF IMPORTED AND DOMESTIC SEAFOOD AND NEW CONCERNS REGARDING ANTIBIOTIC RESIDUES SUCH AS SULFAMETHAZINE.

FOR EXAMPLE, DURING 1987, VIOLATIVE FOOD PRODUCTS INCLUDED: CHEESES FROM FRANCE AND ITALY AND CRABMEAT FROM MEXICO DUE TO LISTERIA CONTAMINATION; PRESERVED FRUIT FROM TAIWAN, HONG KONG, AND THE PEOPLES REPUBLIC OF CHINA DUE TO THE PRESENCE OF UNAPPROVED COLORS OR SWEETENERS; SHRIMP FROM A NUMBER OF COUNTRIES BECAUSE OF EXCESS SULFITE LEVELS; DRIED FRUITS, DEHYDRATED VEGETABLES, AND COOKIES FROM SEVERAL COUNTRIES DUE TO UNDECLARED SULFITES; AND CERAMIC WARE FROM HONG KONG, TAIWAN, ITALY, AND FRANCE DUE TO EXCESSIVE LEVELS OF LEAD OR CADMIUM. TO AID THE RAPID DETECTION OF PRODUCTS WITH VIOLATIVE LEVELS OF LEAD, WE HAVE DEVELOPED AND ADOPTED PROCEDURES THAT CAN BE USED ON THE SPOT TO DETECT LEAD THAT LEACHES FROM POTTERY THAT IS IMPROPERLY GLAZED. WITH YOUR PERMISSION, I WOULD BE HAPPY TO GIVE YOU A DEMONSTRATION OF THIS TEST.

FOLLOWING UP ON THE CHERNOBYL NUCLEAR ACCIDENT OF LAST YEAR, FDA CONTINUED ITS SAMPLING AND ANALYSIS OF IMPORTED FOOD PRODUCTS FOR RADIOACTIVE CONTAMINATION. THE SAMPLING PROGRAM RESULTED IN THE DETENTION OF FOURTEEN SAMPLES OF IMPORTED FOODSTUFFS AND THE AUTOMATIC DETENTION OF CERTAIN PASTA PRODUCTS FROM GREECE.

IN FISCAL YEAR 1987, FDA DETAINED MORE THAN 5600 SHIPMENTS FOR FILTH COVERING A WIDE RANGE OF PRODUCTS SUCH AS BASMATI RICE, BLACK PEPPERS, AND SEAFOOD. IN THE SAME PERIOD, NEARLY 3500 FOOD SHIPMENTS WERE DETAINED BECAUSE OF CHEMICAL CONTAMINATION SUCH AS MERCURY IN SWORDFISH OR PESTICIDES IN FRESH FRUITS OR VEGETABLES.

FOOD SURVEILLANCE OVERALL

THE AGENCY IS TAKING SEVERAL ACTIONS TO IMPROVE ITS MONITORING OF THE FOOD SUPPLY FOR PESTICIDE RESIDUES. AMONG THE ACTIONS ARE

EFFORTS TO: (1) IMPROVE THE DATA SYSTEM FOR HANDLING INFORMATION RESULTING FROM REGULATORY SAMPLE ANALYSIS; (2) INCREASE THE INFORMATION AVAILABLE ON FOREIGN PESTICIDES WHICH MAY BE USED ON PRODUCTS IMPORTED TO THIS COUNTRY AS DESCRIBED ABOVE; (3) IMPROVE THE ANALYTICAL METHODS USED TO DETECT PESTICIDE RESIDUES IN FOODS; AND (4) DESIGN SURVEILLANCE ACTIVITIES TO ACHIEVE MORE COMPREHENSIVE MONITORING OF THE FOOD SUPPLY. WHEN FULLY IMPLEMENTED, THESE STEPS WILL HELP TO FURTHER MINIMIZE THE CHANCES THAT THERE WILL BE ILLEGAL PESTICIDE RESIDUES IN THE NATION'S FOOD SUPPLY, ESPECIALLY IMPORTED PRODUCTS.

IN 1987, THE MOST SERIOUS HEALTH PROBLEMS CONTINUED TO INVOLVE PATHOGENIC MICROORGANISMS IN VARIOUS FOOD PRODUCTS. LISTERIA AND SALMONELLA CONTAMINATION IN FOODS RANK AMONG THE MOST PERSISTENT AND SERIOUS PROBLEMS. LISTERIA WAS IMPLICATED IN AT LEAST 17 DEATHS. ONE OUTBREAK, INVOLVING 36 CONFIRMED CASES OF LISTERIOSIS, OCCURRED IN PHILADELPHIA EARLY IN THE YEAR RESULTING IN 16 DEATHS, INCLUDING TWO NEWBORNS. BECAUSE A NUMBER OF LISTERIA SEROTYPES WERE INVOLVED, A SINGLE FOOD SOURCE WAS DIFFICULT TO CONFIRM; HOWEVER, ICE CREAM CONSUMPTION WAS SIGNIFICANTLY ASSOCIATED WITH MANY OF THE CASES. THE OTHER DEATH RESULTED FROM AN OUTBREAK IN NEW YORK STATE AND WAS DIRECTLY LINKED TO A SOFT CHEESE PRODUCT.

MICROORGANISMS THAT CAUSE FOODBORNE ILLNESS HAVE PROVEN TO BE ELUSIVE AND STUBBORNLY ADAPTABLE. FOR INSTANCE, LISTERIA HAS SHOWN ITSELF CAPABLE OF PENETRATING A PREVIOUSLY DEPENDABLE LINE OF DEFENSE AGAINST FOODBORNE ILLNESS--LOW-TEMPERATURE FOOD STORAGE (LOW TEMPERATURES SLOW BACTERIAL GROWTH, BUT EVEN FREEZING FAILS TO KILL THE BACTERIA). AND CAMPYLOBACTER, ONLY RECENTLY IDENTIFIED AS A MAJOR CAUSE OF HUMAN DIARRHEAL ILLNESS, IS NOW THOUGHT TO BE THE LEADING CAUSE OF BACTERIAL DIARRHEA IN THE UNITED STATES.

INCREASED SURVEILLANCE ACTIVITIES CONCENTRATED PARTICULARLY ON IDENTIFYING THE PRESENCE OF LISTERIA MONOCYTOGENES IN MILK, ICE CREAM PRODUCTS AND DOMESTIC AND IMPORTED CHEESE. RECALLS BECAME NECESSARY WHENEVER THIS PATHOGEN WAS FOUND. TO HELP SOLVE SOME OF THE PROBLEMS ENCOUNTERED, FDA PERSONNEL WORKED CLOSELY WITH THE DAIRY INDUSTRY THROUGH A SERIES OF MEETINGS AND SEVERAL WORKSHOPS ON LISTERIA. IN ADDITION, IMPROVED DATA PROCESSING HAS PRODUCED BETTER ANALYSES OF DATA ON FOODBORNE PATHOGENS AND A JOINT FDA/USDA PROGRAM IS UNDER WAY TO IDENTIFY SOURCES OF COW'S MILK INFECTED WITH LISTERIA MONOCYTOGENES UNDER NATURAL CONDITIONS. FDA SCIENTISTS ALSO DEVELOPED A NEW METHOD FOR IDENTIFYING THE LISTERIA ORGANISM. THROUGH THE APPLICATION OF A NEW BIOTECHNOLOGY TECHNIQUE THE TIME REQUIRED FOR IDENTIFYING THE ORGANISM HAS BEEN SHORTENED CONSIDERABLY BY THE DEVELOPMENT OF DNA PROBES. THIS TYPE OF RESEARCH IN FDA ILLUSTRATES HOW THE AGENCY APPLIES SCIENCE TO NATIONAL NEEDS. ADDITIONAL TESTING METHODS ARE STILL NEEDED, HOWEVER, FOR OTHER DISEASES, AS WELL AS IMPROVED METHODS FOR TESTING FOR VARIOUS PESTICIDES.

EDUCATION IS ALSO A MAJOR PORTION OF OUR MISSION. FDA HAS BEEN EXTREMELY CONCERNED ABOUT OUTBREAKS OF MILK-BORNE DISEASE AND THE NEED FOR INCREASED TRAINING OF FEDERAL, STATE, AND INDUSTRY PERSONNEL INVOLVED IN MILK SAFETY PROGRAMS. FDA PROVIDED TRAINING FOR TWICE AS MANY INDIVIDUALS IN 1987 AS IN PRIOR YEARS, AND EXPECTS TO INCREASE THESE EFFORTS IN 1988 BY AN ADDITIONAL 25 PERCENT.

SULFITES

ANOTHER FOOD SAFETY PROBLEM WE CONTINUE TO ADDRESS INVOLVES THE USE OF SULFITING AGENTS IN FOODS. RECENTLY, TWO REGULATIONS BECAME EFFECTIVE WHICH WILL PROTECT INDIVIDUALS SENSITIVE TO SULFITES FROM SERIOUS ADVERSE REACTIONS. ONE REGULATION PROHIBITS SULFITE USE ON RAW FRUITS AND VEGETABLES EXCEPT POTATOES. THE

SECOND ONE REQUIRES THAT ANY DETECTABLE AMOUNT OF SULFITE IN THE FINISHED FOOD BE DECLARED ON THE LABEL. IN ADDITION, WE HAVE ISSUED A THIRD REGULATION REQUIRING WARNING STATEMENTS IN THE PROFESSIONAL LABELING OF PRESCRIPTION DRUGS CONTAINING SULFITES. MORE RECENTLY, FDA PUBLISHED ITS PROPOSED REGULATIONS TO BAN THE USE OF SULFITES IN FRESH POTATOES ON DECEMBER 10, 1987. THE COMMENT PERIOD FOR THIS PROPOSAL CLOSED MARCH 9, 1988. ANOTHER PROPOSAL TO ADDRESS THE USE OF SULFITES IN OTHER FOODS IS UNDER ADMINISTRATIVE REVIEW AT THIS TIME. FDA EXPECTS PUBLICATION OF THIS PROPOSAL IN THE NEAR FUTURE. THE PROBLEM OF SULFITES HAS BEEN A VERY COMPLEX ONE TO DEAL WITH, AND IT ILLUSTRATES BOTH HOW FDA MUST RELY ON A CORPS OF SKILLED SCIENTISTS AND ALSO WHY CONSUMER AND INDUSTRY EDUCATION ARE AN ESSENTIAL PART OF FDA'S MISSION.

ESTIMATING FOOD CONSUMPTION PATTERNS

A BASIC ISSUE IN FDA'S REGULATION OF FOOD ADDITIVES AS WELL AS IN SETTING ACCEPTABLE LEVELS OF FOOD CONTAMINANTS IS THE MEASUREMENT OF THE FOOD SUPPLY AS IT IS CONSUMED BY INDIVIDUALS. THAT IS, WE MUST KNOW HOW PEOPLE STRUCTURE THEIR FOOD CONSUMPTION SO THAT WE CAN ESTIMATE THE POSSIBLE RISKS THAT MAY OCCUR FROM CONSUMING SPECIFIC FOODS. AS PART OF FDA'S ONGOING EVALUATION OF DIETARY EXPOSURE METHODOLOGIES, WE WILL BE CONDUCTING A REVIEW AND COMPARISON OF PROCEDURES AND POLICIES USED BY OUR CENTER FOR FOOD SAFETY AND APPLIED NUTRITION AND OUR CENTER FOR VETERINARY MEDICINE. LATER IN 1988, WE WILL BE RECEIVING A REPORT PREPARED BY EXPERTS OUTSIDE THE AGENCY ON APPROACHES FOR USING DIETARY DATA TO ESTIMATE EXPOSURE TO SUBSTANCES IN THE FOOD SUPPLY, AND WE WILL BE REVIEWING NEW SOURCES OF DATA INCLUDING NATIONWIDE FOOD CONSUMPTION DATA FOR 1987-1988 WHICH IS BEING PREPARED BY USDA. AS A RESULT OF THESE EFFORTS, WE HOPE TO DEVELOP AGENCY APPROACHES FOR MAKING EXPOSURE ESTIMATES WHICH ARE CONSISTENT WITHIN FDA, TAKE INTO ACCOUNT RECENT DATA BASES, AND OPTIMIZE THE AGENCY'S ABILITY

TO MAKE SUCH ESTIMATES WITHIN REASONABLE TIME FRAMES. IN ALL OF THESE ACTIVITIES, WE WILL BE COORDINATING OUR EFFORTS WITH THE HUMAN NUTRITION INFORMATION SERVICE OF USDA. HOWEVER, BECAUSE OF THE COMPLEXITY OF THESE EFFORTS AND THE NUMBER OF ORGANIZATIONS INVOLVED, WE DO NOT EXPECT COMPLETION OF THIS PROJECT UNTIL SOME TIME IN 1989 AT THE EARLIEST.

BIOTECHNOLOGY

I PREVIOUSLY MENTIONED SOME OF THE ADVANCES IN BIOTECHNOLOGY IN THE AREAS OF DRUGS AND BIOLOGICS, SUCH AS THE WESTERN BLOT TEST FOR AIDS ANTIBODIES. TWO MAJOR BIOLOGICAL PRODUCTS PRODUCED BY BIOTECHNOLOGY WERE LICENSED BY FDA IN 1987 -- ALTEVASE (TPA) AND STREPTAKINASE, WHICH BOTH LIMIT HEART DAMAGE BY DISSOLVING BLOOD CLOTS IF ADMINISTERED IMMEDIATELY AFTER A HEART ATTACK. IN ADDITION, ADVANCES IN BIOTECHNOLOGY HAVE ALSO LED TO FASTER AND MORE ACCURATE IN VITRO DIAGNOSTIC PRODUCTS, SUCH AS MONOCLONAL ANTIBODY-BASED REAGENTS, AND MORE RECENTLY, DNA AND RNA PROBES FOR INFECTIOUS DISEASES. IT IS PERHAPS NOT SO WELL KNOWN THAT BIOTECHNOLOGY TECHNIQUES WILL HAVE A MAJOR IMPACT ON FOOD AND LIVESTOCK PRODUCTION.

DURING 1987, FDA CARRIED OUT A STUDY OF EMERGING DEVELOPMENTS IN FOODS BIOTECHNOLOGY, UTILIZING BOTH CURRENTLY AVAILABLE DATA AND THE BEST ESTIMATES OF OVER 100 EXPERTS. A MINIMUM OF 150 FIRMS WERE FOUND TO BE WORKING ON BIOTECHNOLOGY PROJECTS WITH FOODS, AND OVER 800 BIOTECHNOLOGICAL APPLICATIONS IN THE FOODS AREA WERE IDENTIFIED. PRIMARILY THESE INCLUDE FOOD ADDITIVES, DIAGNOSTIC TESTS, GENETICALLY-MODIFIED PLANTS, AND INDUSTRIAL ENZYMES. NEARLY 95 PERCENT OF THESE APPLICATIONS WERE ESTIMATED TO BE TECHNICALLY FEASIBLE BY 1990 AND 75 PERCENT COMMERCIALLY AVAILABLE ABOUT TWO YEARS LATER.

In addition, FDA has also completed a study of biotechnology activities in the animal health industry. Findings show that some 92 companies in this country are involved in biotechnology research and development and 212 distinct veterinary products and processes based on these new technologies have been targeted for commercialization. At the present time there are a number of new animal drug applications for biotech-derived products under review and there are more than 100 investigational applications for use of these products in research and development.

The applications for these products will soon be upon us, and illustrate another reason why FDA must constantly be updating and upgrading its base of scientific knowledge and capability. We will include a major section on biotechnology in Action Plan Phase III.

Risk Assessment

In all of its activities, FDA's mission to protect public health involves assessing risks which impose either a potential or a clear threat to the consumer's health. As the Committee knows, FDA must make regulatory decisions, such as those on levels of different substances in the food supply, in the face of both increasingly sensitive measuring technology and strict legislative standards such as the Delaney Clauses. By applying the scientific concept of risk assessment, FDA has refrained from taking action in some situations where minute quantities of a carcinogenic substance presents essentially no human risk. However, the risk assessment process within FDA must be considered not only as an FDA concern, but also a concern of other agencies who use risk assessment processes and procedures. Many of the toxic chemicals regulated by FDA are reviewed by the Environmental Protection Agency, the Consumer Product Safety Commission, the Occupational

SAFETY AND HEALTH ADMINISTRATION, AND OTHERS. FDA SEEKS TO DEVELOP A STANDARDIZED AND UNDERSTANDABLE METHODOLOGY THAT WILL PROVIDE UNIFORMITY FOR SOME OF THE PROCESSES AND PROCEDURES USED IN RISK ASSESSMENT ACROSS GOVERNMENT.

A FURTHER COMPLICATION IN OUR ATTEMPT TO REFINE AND APPLY RISK ASSESSMENT METHODOLOGY TO FOOD SAFETY IS A LEGAL ONE. THE AGENCY HAS INTERPRETED THE DELANEY CLAUSE IN ACCORDANCE WITH THE PRINCIPLE THAT EVEN A STRICTLY WORDED LAW DOES NOT APPLY TO DE MINIMIS SITUATIONS, IN THIS CASE, A DE MINIMIS RISK OF CANCER, AS DETERMINED BY RISK ASSESSMENT. A COURT OF APPEALS, HOWEVER, DECIDED THAT OUR INTERPRETATION IS WRONG. IF THAT DECISION ULTIMATELY PREVAILS AND THE DELANEY CLAUSE REMAINS UNCHANGED, FDA WILL HAVE TO CONSIDER TAKING SOME ACTIONS IT BELIEVES ARE UNSUPPORTABLE FROM THE POINT OF VIEW OF SCIENCE AND PUBLIC HEALTH--ACTIONS SUCH AS PROHIBITING THE USE OF SOME COLORANTS IN FOODS AND COSMETICS.

THE IMPORTANCE OF RISK ASSESSMENT CANNOT BE OVEREMPHASIZED. THE MAJOR COMPONENTS OF FDA WORK CLOSELY TOGETHER ON MANY RISK ASSESSMENT ISSUES, AND WE WORK WITH MANY OUTSIDE INSTITUTIONS, INCLUDING GOVERNMENT AGENCIES SUCH AS SEVERAL OF THOSE WITHIN USDA, AND ACADEMIC AND RESEARCH INSTITUTIONS. IN THE FIELD OF RISK ASSESSMENT, FDA'S NATIONAL CENTER FOR TOXICOLOGICAL RESEARCH PLAYS A KEY ROLE NOT ONLY IN ASSISTING FDA IN EVALUATING POSSIBLE RISKS, BUT ALSO BY ADVANCING THE SCIENCE OF RISK ASSESSMENT ITSELF. NCTR CONTINUES TO MAKE MAJOR STRIDES IN THIS AREA, PARTICULARLY IN REFINING THE WAYS IN WHICH WE MUST EXTRAPOLATE THE RESULTS OF ANIMAL TESTING DATA TO ESTIMATE POSSIBLE IMPACTS ON HUMANS. AS AN EXAMPLE OF OUR EFFORTS TO BRING TOGETHER OUR EXPERTISE WITH THAT OF OTHERS, NCTR WORKS DIRECTLY WITH A CONSORTIUM OF 24 COLLEGES AND UNIVERSITIES LOCATED THROUGHOUT THE SOUTH, WHICH PERMITS ACCESS BY STUDENTS AND FACULTY TO NCTR'S SCIENTIFIC RESOURCES, AND ALLOWS THE CENTER TO ENHANCE ITS

RESEARCH EFFORTS BY RECOGNIZING AND FOSTERING SCIENTIFIC TALENT AND RESEARCH DEVELOPMENTS ELSEWHERE. IN ANOTHER SUCH EFFORT, WE ARE WORKING WITH ACADEMIC AND RESEARCH INSTITUTIONS AND OTHERS INVOLVED IN FOOD SAFETY IMPROVEMENT TO FOSTER IMPROVED RESEARCH AS WELL AS TRAINING ACTIVITIES IN THE AREA OF FOOD PROCESSING TECHNOLOGY AND QUALITY CONTROL.

MANY CONSUMERS ARE CONFUSED BY CONFLICTING STATEMENTS OF HUMAN RISK, AND DO NOT UNDERSTAND THE RELATIVELY LARGE RANGE OF UNCERTAINTY SURROUNDING THE BEST ESTIMATES OF RISK. AND WITH HUNDREDS OF CHEMICAL COMPOUNDS THAT ARE SUSPECTED TO CAUSE CANCER IN ANIMALS, CONSUMER CONFIDENCE WILL ERODE FURTHER UNLESS WE CAN BOTH RESOLVE THE UNCERTAINTIES CURRENTLY SURROUNDING RISK ASSESSMENT AND EDUCATE THE PUBLIC ON THE ISSUES. SOME OF THESE COMPOUNDS, SUCH AS NITRITES, OCCUR NATURALLY AND ARE A PART OF OUR DIET. OTHERS ARE INTRODUCED INTO OUR ENVIRONMENT BUT AT SUCH MINUTE QUANTITIES THAT THEY PRESENT ESSENTIALLY NO RISK. WE ARE WORKING TO IMPROVE OUR SCIENTIFIC METHODOLOGIES TO REGULATE THE COMPOUNDS. THE UNCERTAINTY ASSOCIATED WITH OUR CURRENT METHODS SOMETIMES REQUIRES THAT OUR SCIENTIFIC JUDGMENT BE BASED ON EXTREMELY CONSERVATIVE ASSUMPTIONS. AS OUR SCIENTIFIC KNOWLEDGE INCREASES AND WE ELIMINATE THESE UNCERTAINTIES, OUR POLICIES ON LEVELS OF SUCH THINGS AS UNINTENTIONAL OR INADVERTENT CONTAMINANTS CAN BE MORE CLEARLY ESTABLISHED UPON SOUND SCIENTIFIC PRINCIPLES.

NEW PRODUCT EVALUATION

ONE OF THE MOST IMPORTANT AND VISIBLE ACTIONS OF THE AGENCY IS NEW PRODUCT EVALUATION. I SHALL DESCRIBE SOME REPRESENTATIVE AREAS THAT I KNOW ARE OF INTEREST TO THE COMMITTEE.

ORPHAN PRODUCTS

THE FOOD AND DRUG ADMINISTRATION CONTINUES TO CARRY OUT A PROGRAM TO ENCOURAGE THE DEVELOPMENT OF DRUGS, BIOLOGICALS, MEDICAL DEVICES, AND MEDICAL FOODS FOR RARE DISEASES OR CONDITIONS. THE AGENCY MET WITH 40 POTENTIAL SPONSORS OF ORPHAN DRUGS IN 1987. THE SPONSORS WERE PROVIDED WITH INFORMATION ON DEVELOPMENT OF THESE DRUGS AND GUIDANCE ON APPLYING FOR "DESIGNATION" AS AN ORPHAN DRUG UNDER THE FEDERAL FOOD, DRUG, AND COSMETIC ACT. ADDITIONALLY, EIGHT SPONSORS REQUESTED AND RECEIVED FORMAL "PROTOCOL ASSISTANCE" WHEREBY FDA PROVIDED THE SPONSORS WITH GUIDANCE IN DESIGNING AND CONDUCTING HUMAN STUDIES ON DRUGS FOR RARE DISEASES OR CONDITIONS. DURING 1987, THE FDA COMPLETED SCIENTIFIC REVIEWS ON 83 SPONSOR REQUESTS FOR DESIGNATION OF DRUGS AS ORPHAN DRUGS. AS PART OF THE REVIEW, THE SPONSOR IS REQUIRED TO SUBMIT DATA ADEQUATELY DEMONSTRATING THE USE OF THE DRUG FOR DISEASES OR CONDITIONS AFFECTING LESS THAN 200,000 PEOPLE IN THE U.S. BASED ON THESE REVIEWS, 59 PRODUCTS WERE DESIGNATED AS ORPHAN DRUGS DURING 1987. THE INCREASING INTEREST OF THE DRUG MANUFACTURERS IS DEMONSTRATED BY THE FACT THAT THIS NUMBER OF ORPHAN PRODUCT DESIGNATIONS IS 50% HIGHER THAN IN ANY PREVIOUS YEAR. OF 264 SPONSOR REQUESTS FOR DESIGNATION RECEIVED SINCE THE ACT PASSED, 183 (OR 69%) HAVE BEEN DESIGNATED AS ORPHAN PRODUCTS.

UNDER THE FDA ORPHAN PRODUCT GRANT PROGRAM--ABOUT $4 MILLION IN 1987--THE AGENCY PROVIDED $2 MILLION FOR FUNDING 25 NEW STUDIES. THESE STUDIES WERE DESIGNED TO PROVIDE INFORMATION ON HUMAN SAFETY AND EFFECTIVENESS OF 24 DRUGS AND ONE MEDICAL DEVICE FOR DISEASES OR CONDITIONS SUCH AS SEVERE COMBINED IMMUNOGENICITY DISEASE, COLLECTION OF SICKLE ERYTHROCYTES, SUPPRESSION OF SPASTICITY, AIDS/ARC, LOW GRADE GLIOMA, NEUROBLASTOMA, CONGENITAL TOXOPLASMOSIS, BIOPTERIN DEFICIENCY, VON WILLEBRAND DISEASE, TOURETTE SYNDROME, NEPHROPATHIC CYSTINOSIS, NOCTURNAL MYOCLONUS, PAGET'S DISEASE OF BONE, ASPERGILLUS INFECTIONS AND MENKES

DISEASE. $1.9 MILLION WAS ALSO EXPENDED DURING THE YEAR FOR CONTINUATION OF 27 STUDIES BEGUN IN PRIOR YEARS. TOTAL GRANT FUNDING IN THIS PROGRAM WILL BE $4.5 MILLION IN 1988 AND IS ESTIMATED AT $4.7 MILLION IN 1989.

THE FRUITION OF THESE LABORS WAS DEMONSTRATED DURING 1987 BY THE APPROVAL OF EIGHT ORPHAN PRODUCTS, INCLUDING ZIDOVUDINE--FORMERLY CALLED AZT--FOR AIDS, AND PRODUCTS FOR A CERTAIN FORMS OF LEUKEMIA, PAGET'S DISEASE, LACK OF GROWTH HORMONE, AND A PRODUCT WHICH REDUCES THE RISK OF BLEEDING IN HEMOPHILIACS DURING TOOTH EXTRACTION.

NEW DRUG REVIEW

FDA IS CONTINUING ITS INTENSIVE EFFORTS TO IMPROVE BOTH THE QUALITY AND THE TIMELINESS OF THE AGENCY'S REVIEW OF NEW DRUG APPLICATIONS. ONE OF THESE STEPS, AS I MENTIONED PREVIOUSLY, WAS TO BREAK THE FORMER CENTER FOR DRUGS AND BIOLOGICS INTO TWO CENTERS, CENTER FOR BIOLOGICS EVALUATION AND RESEARCH AND CENTER FOR DRUGS EVALUATION AND RESEARCH, TO ASSURE AGGRESSIVE MANAGEMENT OF OUR MANY RESPONSIBILITIES IN THESE AREAS, ESPECIALLY AIDS AND NEW DRUG REVIEW. OUR NEW DIRECTOR OF THE CENTER FOR DRUGS EVALUATION AND RESEARCH IS DR. CARL PECK, A SCIENTIST WITH AN OUTSTANDING RESEARCH BACKGROUND IN PHARMACOKINETICS, OR HOW DRUGS WORK IN THE BODY. HE BRINGS AN EXTRA DIMENSION TO THE LEADERSHIP OF THIS WORK. WE HAVE ALSO INITIATED INTENSIVE RECRUITING EFFORTS FOR ADDITIONAL MEDICAL OFFICERS. DURING 1987, THE MEDICAL STAFF DEVOTED TO NEW DRUG REVIEW WAS INCREASED BY 14. IN 1987, WE ESTABLISHED A NEW REVIEW DIVISION FOR GASTROINTESTINAL AND COAGULATION DRUG PRODUCTS. WE ARE NOW IN THE PROCESS OF SETTING UP ANOTHER NEW DIVISION FOR ANTI-VIRAL DRUGS, PRIMARILY BECAUSE OF THE IMPENDING WORKLOAD OF POSSIBLE THERAPIES FOR AIDS, AND INTENSIVE RECRUITING EFFORTS CONTINUE.

AS EVIDENCE OF THE SUCCESS OF THIS COMMITMENT, IN 1987 FDA APPROVED 21 NEW CHEMICAL ENTITIES AND A TOTAL OF 77 NEW DRUG APPLICATIONS (NDAS). AMONG THE SIGNIFICANT NEW DRUG APPROVALS WERE ZIDOVUDINE (AZT) TO TREAT AIDS; LOVASTATIN, TO LOWER CHOLESTEROL; ENCAINIDE, FOR THE TREATMENT OF VENTRICULAR ARRHYTHMIAS; CLOFAZIMINE, FOR TREATMENT OF A FORM OF LEPROSY RESISTANT TO OTHER DRUGS; PORCINE ANTIHEMOPHILIC FACTOR AND TRANEXAMIC ACID, FOR THE REDUCTION OF BLEEDING IN HEMOPHILICS. OF THESE APPROVALS, ZIDOVUDINE, CLOFAZIMINE, AND TRANEXAMIC ACID ARE ORPHAN DRUGS. THE NUMBER OF OVERDUE EFFICACY SUPPLEMENTS (APPLICATIONS TO LABEL ALREADY-APPROVED DRUGS FOR NEW USES) HAS BEEN REDUCED BY 40 PERCENT SINCE MARCH, 1986, WHEN THIS INITIATIVE WAS STARTED. ALSO, THE NUMBER OF OVERDUE (IN REVIEW OVER 180 DAYS) NDAS HAS BEEN REDUCED FROM 169 IN DECEMBER, 1985 TO 90 IN DECEMBER, 1987, THE LOWEST IN RECENT HISTORY.

WHILE THE TOTAL TIME FOR CLINICAL DEVELOPMENT AND REVIEW OF TOTALLY NEW DRUGS HAS BEEN REDUCED FROM AN AVERAGE OF 10.5 YEARS IN 1981 TO AN AVERAGE OF 8.2 YEARS IN 1986, FDA'S TIME TO REVIEW AND EVALUATE APPLICATIONS STILL SUBSTANTIALLY EXCEEDS THE 180 DAYS ESTABLISHED BY CONGRESS. THE INCREASE OF 16 STAFFYEARS AND $1 MILLION REQUESTED IN 1989 WILL ALLOW US TO CONTINUE TO BUILD ON THESE GAINS TO FURTHER REDUCE THE TIME IT TAKES FOR NEW PRODUCTS TO REACH THE MARKET.

PUBLICATION OF THE INVESTIGATIONAL NEW DRUG (IND) REWRITE FINAL RULE WAS A MAJOR MILESTONE IN THE CONTINUING EFFORT TO STREAMLINE THE DRUG REVIEW PROCESS. THESE REVISED REGULATIONS, WHICH BECAME EFFECTIVE ON JUNE 17, 1987, ADDRESS SEVERAL AREAS OF DESIRED IMPROVEMENTS: CLOSER ATTENTION TO THE SAFETY OF HUMAN TEST SUBJECTS DURING THE EARLY PHASES OF CLINICAL RESEARCH; EXTENDING GREATER FREEDOM FOR SPONSORS TO DESIGN AND IMPLEMENT CLINICAL STUDIES; IMPLEMENTING A SIMPLIFIED APPLICATION FORMAT; EXTENDING THE OPPORTUNITY FOR FDA AND DRUG SPONSORS TO MEET PERIODICALLY TO

CONCUR ON THE DESIGN OF MAJOR CLINICAL TRIALS; AND IMPROVING THE PRESENTATION OF INFORMATION IN A MARKETING APPLICATION. FDA HAS MET EXTENSIVELY WITH RESEARCHERS AND WITH REGULATED INDUSTRY TO EXPLAIN THE IMPACT OF THESE CHANGES. AS OF THE END OF 1987, FDA HAD OVER 10,000 ACTIVE IND'S.

WHILE FDA HAS PERMITTED THE COMPASSIONATE USE OF INVESTIGATIONAL DRUGS IN THE PAST, HEIGHTENED CONCERN OVER THE PROMPT AVAILABILITY OF NEW DRUGS FOR AIDS RELATED OR LIFE-THREATENING DISEASES PROMPTED THE DEVELOPMENT OF THE NEW TREATMENT IND REGULATIONS WHICH WERE PUBLISHED AS PART OF THE OVERALL IND RULES. THESE NEW PROCEDURES PROVIDE FOR EXPANDED USE OF INVESTIGATIONAL NEW DRUGS IN PATIENTS OUTSIDE OF CONTROLLED CLINICAL TRIALS IN CASES OF SERIOUS OR IMMEDIATELY LIFE-THREATENING DISEASES SUCH AS AIDS, FOR WHICH NO COMPARABLE OR SATISFACTORY ALTERNATIVE DRUG OR OTHER THERAPIES EXIST. SINCE THE REGULATION WAS WRITTEN WE HAVE APPROVED THREE DRUGS FOR TREATMENT INDS--TRIMETREXATE; CYTOMEGALOVIRUS IMMUNE GLOBULIN FOR INFECTIONS IN RENAL TRANSPLANT PATIENTS; AND IFOSTAMIDE AND MESNA FOR A FORM OF CANCER. ADDITIONALLY, WE HAVE FOSTERED THE ADMINISTRATION OF THE DRUG GANCICLOVIR--FOR CMV RETINITIS--TO 1500 AIDS PATIENTS ON A "COMPASSIONATE IND" BASIS.

ANOTHER CRITICAL FACTOR IN STREAMLINING NEW DRUG REVIEW IS THE DEVELOPMENT OF WELL-ORGANIZED APPLICATIONS BY THE DRUG SPONSORS. ON APRIL 2, 1987, FDA ANNOUNCED THE AVAILABILITY OF 12 GUIDELINES TO ASSIST DRUG APPLICATION SPONSORS. GUIDELINES ARE ALSO BEING DEVELOPED FOR FORMATTING CLINICAL DATA AND FOR ADVERSE REACTION REPORTING. NUMEROUS SEMINARS AND MEETINGS HAVE BEEN CONDUCTED BY FDA TO FAMILIARIZE DRUG SPONSORS WITH THESE NEW AND RECENTLY-REVISED GUIDELINES.

FDA HAS ALSO ISSUED GUIDELINES FOR SUBMITTING NDA BIOPHARMACEUTICS DATA IN COMPUTERIZED FORM. A NUMBER OF ELECTRONIC SUBMISSIONS

HAVE ALREADY BEEN RECEIVED. SUBMISSION OF DATA IN AN ELECTRONIC FORMAT ALLOWS A REVIEWER TO CONDUCT ANALYSIS OF APPLICATION DATA MORE EFFICIENTLY THAN WITH A PAPER SUBMISSION. FDA'S BIOPHARMACEUTICAL STAFF MEMBERS HAVE RECEIVED COMPUTER TRAINING ON THIS METHOD, AND AS A RESULT, HAVE MADE SIGNIFICANT PROGRESS TOWARD INCREASED EFFICIENCY. IN ADDITION, WE ARE WORKING CLOSELY WITH THE PHARMACEUTICAL MANUFACTURERS ASSOCIATION AND SEVERAL DRUG FIRMS TO DEVELOP MODELS FOR THE SUBMISSION OF OTHER TYPES OF NDA INFORMATION IN ELECTRONIC FORM, TO FACILITATE THE SUBMISSION OF NDAS AND TO ALLOW AUTOMATED ASSISTANCE TO FDA'S DRUG REVIEW STAFF TO SPEED THE REVIEW PROCESS WITHIN FDA.

IN 1987 FDA APPROVED SEVERAL SIGNIFICANT PRODUCTS DERIVED THROUGH BIOTECHNOLOGY WHICH INVOLVED MAJOR SCIENTIFIC ADVANCES. IN APRIL FDA LICENSED A WESTERN BLOT TEST KIT FOR SCREENING BLOOD AND FOR VALIDATING INITIAL SCREENINGS OF DONATED BLOOD FOR AIDS ANTIBODIES.

TWO OTHER BIOLOGICAL PRODUCTS, ALTEVASE (TPA) AND STREPTOKINASE FOR INTRAVENOUS USE, WERE ALSO LICENSED BY FDA IN 1987. BOTH PRODUCTS LIMIT HEART DAMAGE BY DISSOLVING BLOOD CLOTS IF ADMINISTERED IMMEDIATELY AFTER A HEART ATTACK. ALTEVASE IS A GENETICALLY ENGINEERED COPY OF A NATURAL PROTEIN, TPA (TISSUE PLASMINOGEN ACTIVATOR), WHICH IS PRODUCED IN THE BODY IN MINUTE QUANTITIES. THROUGH RECOMBINANT DNA TECHNOLOGY TPA CAN NOW BE PRODUCED IN SUFFICIENT QUANTITIES NEEDED TO TREAT PATIENTS FOR ARTERIAL BLOOD CLOTS. STREPTOKINASE IS A PURIFIED PROTEIN PREPARATION DERIVED FROM A COMMON BACTERIAL ORGANISM. THE MOST IMPORTANT BENEFIT OF STREPTOKINASE IS THE DISSOLUTION OF BLOOD CLOTS IN CORONARY ARTERIES, BUT IT ALSO HAS OTHER EFFECTS, SUCH AS LOWERING BLOOD PRESSURE AND THINNING THE BLOOD.

OTHER IMPORTANT BIOLOGICS APPROVED DURING THE PAST YEAR INCLUDE THE ENHANCED POTENCY, "SALK-TYPE" INACTIVATED POLIOVIRUS VACCINE, WHICH HAS SIGNIFICANTLY IMPROVED EFFECTIVENESS AND WILL HAVE MUCH BROADER PUBLIC HEALTH USE. THERE HAS BEEN A CONTINUATION IN THE EXPLOSION OF PRODUCTS INVOLVING NEW BIOTECHNOLOGY BEING STUDIED UNDER INVESTIGATIONAL NEW DRUG APPLICATIONS. SOME IMPORTANT EXAMPLES ARE THE RECOMBINANT DNA-DERIVED LIVE VACCINIA VIRUS VACCINE STUDIED FOR AIDS, AND THE MANY GROWTH FACTORS, LYMPHOKINES, AND CYTOKINES USED TO TREAT CANCER AND AS MODULATORS OF THE IMMUNE SYSTEM.

GENERIC DRUGS

IN THE AREA OF GENERIC DRUGS, FDA IS CONTINUING ITS SUCCESS IN REVIEWING ABBREVIATED NEW DRUG APPLICATIONS (ANDAS) FOR GENERIC VERSIONS OF PIONEER DRUGS APPROVED SINCE 1962. THE AUTHORITY FOR THIS PROCESS COMES FROM THE DRUG PRICE COMPETITION AND PATENT TERM RESTORATION ACT OF 1984. IN 1987, FDA APPROVED A RECORD NUMBER OF 748 ANDAS (INCLUDING 88 ANDAS FOR ANTIBIOTICS), OF WHICH 32 REPRESENTED DRUGS OR DOSAGE FORMS AVAILABLE AS GENERICS FOR THE FIRST TIME. NINETY-FIVE PERCENT OF THESE REVIEWS WERE COMPLETED IN LESS THAN 140 DAYS, WELL UNDER THE STATUTORY REVIEW PERIOD.

MEDICAL DEVICES

IN ITS REVIEW OF NEW MEDICAL DEVICES, FDA SEEKS TO AVOID UNNECESSARY DELAYS IN THE INTRODUCTION OF BENEFICIAL INNOVATIONS WHILE ASSURING AT THE SAME TIME THE SAFETY AND EFFECTIVENESS OF THE PRODUCTS. AS OF SEPTEMBER 30, 1987, FDA HAD COMPLETELY ELIMINATED MAJOR BACKLOGS IN EACH OF ITS MAJOR DEVICE PRODUCT REVIEW APPLICATION AREAS, I.E., PREMARKET APPROVAL APPLICATIONS (PMAS), SUPPLEMENTS TO APPROVED PMAS, PREMARKET NOTIFICATION APPLICATIONS (510(K)S), INVESTIGATIONAL DEVICE EXEMPTION APPLICATIONS (IDES), AND SUPPLEMENTS TO EXISTING IDES. THIS IS THE FIRST TIME THAT THERE HAVE BEEN NO BACKLOGS IN THESE IMPORTANT AREAS SINCE THE MEDICAL DEVICE AMENDMENTS WERE ENACTED IN 1976. DURING

1987, FDA ACTED ON 46 PMAS, 565 PMA SUPPLEMENTS, 224 IDES, AND 4,991 510(K)S. AVERAGE REVIEW TIMES WERE REDUCED FOR ALL DOCUMENTS.

WE WERE PLEASED TO HAVE THESE EFFORTS CITED BY THE PRESIDENT IN HIS MESSAGE TRANSMITTING THE BOOK "MANAGEMENT OF THE UNITED STATES GOVERNMENT 1989". SIGNIFICANT GAINS HAVE BEEN MADE, BUT MORE EFFORT IS NEEDED TO FURTHER IMPROVE THE REVIEW OF NEW DEVICE APPLICATIONS, WHICH WILL PROVIDE EVEN FASTER ACCESS TO NEW TECHNOLOGIES AND FURTHER ECONOMIC GAINS TO THE INDUSTRY. THE REQUESTED INCREASE OF $1.1 MILLION AND 18 FTES WILL ENABLE FDA TO SUSTAIN THE PROGRESS ALREADY MADE IN REVIEWING DEVICE APPLICATIONS IN TWO WAYS: BY ENHANCING OUR RISK ANALYSIS CAPABILITY TO STRENGTHEN THE SCIENTIFIC BASE UPON WHICH DECISIONS REGARDING DEVICE SAFETY AND EFFECTIVENESS ARE MADE, AND BY EXPANDING OUR POSTMARKET SURVEILLANCE PROGRAM. PRODUCT REVIEW ENHANCEMENTS ARE IMPORTANT, YET LESS THAN TWO PERCENT OF DEVICES GO THROUGH THE PREMARKET APPROVAL PROCESS. THE VAST MAJORITY OF MEDICAL DEVICES ARRIVE ON THE MARKET VIA THE 510(K) OR PREMARKET NOTIFICATION PROCESS. FOR THESE DEVICES, WE LEARN ABOUT PROBLEMS USING OUR POSTMARKET SURVEILLANCE PROGRAM, WHICH ENABLES US TO COLLECT AND ANALYZE DEVICE EXPERIENCE DATA, AND TEST PRODUCTS AS NECESSARY. THIS IS CRITICAL TO ENSURE THAT WE CHOOSE SOLUTIONS THAT WILL MOST EFFECTIVELY SOLVE PUBLIC HEALTH PROBLEMS. FOR EXAMPLE, IN THE ANESTHESIA DEATHS OF A FEW YEARS AGO, OUR POSTMARKET SURVEILLANCE DATA REVEALED THAT WHILE A SMALL PERCENTAGE OF PROBLEMS WERE DUE TO ACTUAL MACHINE MALFUNCTION, THE MUCH LARGER PERCENTAGE RESULTED FROM USER ERROR. WE WERE THEN ABLE TO DEVISE THE MOST APPROPRIATE SOLUTION, WHICH IN THIS CASE WAS THE DEVELOPMENT OF A MULTIFACETED EDUCATIONAL PROGRAM AIMED AT THE HEALTH PROFESSIONALS WHO USE THIS ANESTHESIA EQUIPMENT.

ANIMAL DRUGS

TO CONTINUE THE AGENCY'S SUCCESS IN GETTING MOST VETERINARY DRUG APPLICATIONS REVIEWED EXPEDITIOUSLY, FDA APPROVED 23 MAJOR NEW PRESCRIPTION ANIMAL DRUGS AND 23 OVER-THE-COUNTER ANIMAL DRUGS IN 1987. FDA IMPLEMENTED AN IMPROVED MANAGEMENT INFORMATION SYSTEM FOR TRACKING THE REVIEW OF SUCH PRODUCTS. A TISSUE RESIDUE BRANCH WAS FORMED, TO ENSURE THAT ADEQUATE CONTROLS ARE MAINTAINED AGAINST ILLEGAL DRUG RESIDUES IN EDIBLE MEAT. FINALLY, CONTINUED SUCCESS WAS MADE BY THE MINOR SPECIES RESEARCH PROGRAM. A RECENT EXAMPLE WAS THE DEVELOPMENT OF A DRUG THROUGH A GRANT TO THE UNIVERSITY OF MAINE TO TREAT A BACTERIAL DISEASE IN LOBSTERS - A DISEASE ESTIMATED TO COST THE LOBSTER INDUSTRY SOME $2 MILLION ANNUALLY. CLEARLY OUR HIGHEST PRIORITIES IN THE VETERINARY MEDICINE AREA ARE THE PROTECTION OF PUBLIC HEALTH THROUGH PREVENTION OF DRUG RESIDUES IN ANIMAL-DERIVED FOOD, AND A NEED TO TRANSFER NEW TECHNOLOGIES THROUGH THE EFFICIENT EVALUATION OF NEW ANIMAL DRUG APPLICATIONS. THESE PRIORITIES ARE ESPECIALLY IMPORTANT FOR INNOVATIVE, NEW PRODUCTS WHICH ARE THE RESULT OF BIOTECHNOLOGY ADVANCES.

FOOD PETITIONS

IN AN EFFORT TO EXPEDITE THE REVIEW OF FOOD ADDITIVE PETITIONS, WE PLAN TO DEVELOP NEW POLICIES FOR DETERMINING WHEN AN INDIRECT ADDITIVE, SUCH AS PACKAGING MATERIAL, DOES NOT POSE A HEALTH RISK BECAUSE THE AMOUNT OF THE SUBSTANCE THAT MAY ENTER THE FOOD IS SO SMALL AS TO BE INSIGNIFICANT. WITH SUCH A POLICY IN EFFECT WE WILL BE ABLE TO FOCUS OUR RESOURCES ON PROTECTING PEOPLE FROM SUBSTANCES THAT MAY PRESENT A HEALTH RISK. WE BELIEVE THE RESULT OF SUCH A POLICY WILL BE FASTER REVIEW OF INDUSTRY PETITIONS. IN ADDITION, WE WILL BE AUTOMATING ASPECTS OF THE REVIEW, INCLUDING ACCEPTING DATA IN MACHINE-READABLE FORM AND CLARIFYING THE REQUIREMENTS OF THE PROCESS.

DURING FY87, THE AGENCY RECEIVED 77 NEW FOOD ADDITIVE PETITIONS, FIVE NEW COLOR ADDITIVE PETITIONS, AND TEN NEW GRAS PETITIONS. FINAL ACTIONS WERE COMPLETED ON 60 FOOD ADDITIVES, TEN COLOR ADDITIVES, AND NINE GRAS PETITIONS. SIGNIFICANT FOOD ADDITIVE REGULATIONS WERE COMPLETED ON FOUR PETITIONS DEALING WITH ASPARTAME AND A SIGNIFICANT GRAS REGULATION WAS PUBLISHED ON IRON SALTS.

FIELD ACTIVITIES

PERHAPS NO BETTER INDICATOR OF FDA'S JOB IS THE WORK OF OUR FIELD FORCE, WHICH COMPRISES ABOUT 40 PERCENT OF THE AGENCY. THERE ARE APPROXIMATELY 900 INVESTIGATIONAL AND 600 LABORATORY PERSONNEL IN THE FIELD INVOLVED IN ASSURING THE SAFETY AND EFFICACY OF FOODS, DRUGS, BIOLOGICS, VETERINARY DRUGS, DEVICES AND RADIOLOGICAL PRODUCTS. THESE PERSONNEL ARE SPREAD THROUGHOUT THE NATION PRIMARILY IN PROPORTION TO THE LOCATION OF THE FOOD, DRUG, AND OTHER INDUSTRIES WE REGULATE. FOR EXAMPLE, THE DEVICE INDUSTRY IS PRIMARILY LOCATED IN OUR LOS ANGELES, BOSTON, ATLANTA, MINNEAPOLIS, CHICAGO, ORLANDO, AND NEWARK DISTRICTS AND MOST OF OUR DEVICE INVESTIGATIONAL STAFF IS ALSO PRESENT THERE. SIMILARLY, THE THREE LARGEST PORTS OF ENTRY FOR IMPORTED PRODUCTS ARE NEW YORK, LOS ANGELES AND BOSTON AND THESE OFFICES ALSO HAVE THREE OF THE LARGEST FIELD LABORATORIES.

AS I STATED PREVIOUSLY, FIELD STAFF TIME DEVOTED TO COVERAGE OF IMPORTED PRODUCTS HAS INCREASED BY OVER 40 PERCENT OVER THE LAST FOUR YEARS PRIMARILY BY REALLOCATING RESOURCES FROM LOWER PRIORITY ACTIVITIES. RECENT BUDGET INCREASES HAVE ALSO CONTRIBUTED AND THESE INCREASES HAVE ALSO ALLOWED US TO ALLOCATE SUBSTANTIAL RESOURCES TO UPGRADING OUR EQUIPMENT FOR PESTICIDE ANALYSIS THROUGHOUT THE AGENCY.

WE ARE IMPROVING OUR OVERALL LABORATORY FACILITIES IN THE FIELD WITH A NEW BUILDING IN SEATTLE, AND IN RESPONSE TO THE SERIOUS HEALTH HAZARDS MENTIONED EARLIER ASSOCIATED WITH PATHOGENIC ORGANISMS, SUCH AS LISTERIA, WE HAVE ESTABLISHED AN ADDITIONAL MICROBIOLOGICAL CAPABILITY IN OUR NEW DENVER FACILITY.

DURING FISCAL 1987, FDA CONDUCTED OVER 20,000 INSPECTIONS, COLLECTED AND ANALYZED OVER 54,000 DOMESTIC AND IMPORT SAMPLES, CONDUCTED OVER 60,000 WHARF EXAMINATIONS, PARTICIPATED IN THE SEIZURE OF 200 VIOLATIVE PRODUCTS, OVERSAW RECALLS OF 2,398 DEFECTIVE OR OTHERWISE VIOLATIVE PRODUCTS, AND ISSUED OVER 350 REGULATORY LETTERS TO VIOLATIVE FIRMS. EXAMPLES OF THESE ACTIONS INCLUDE RECALLS OF MILK, CHEESE, ICE CREAM, SHRIMP, AND CRABMEAT PRODUCTS DUE TO LISTERIA CONTAMINATION; RECALLS OF POTTERY AND CERAMIC WARE DUE TO HIGH LEVELS OF LEAD AND CADIMUM CONTENT; RECALLS OF SEVERAL PRODUCTS DUE TO UNDECLARED SULFITES; RECALLS OF CANDY BARS BECAUSE OF POSSIBLE CONTAMINATION WITH SALMONELLA; RECALLS OF CONDOMS BECAUSE OF LEAKAGE DEFECTS; SEIZURES OF COUNTERFEIT PRESCRIPTION PRODUCTS; AND SEIZURE OF $7 MILLION WORTH OF ILLEGAL STEROIDS.

AT THIS POINT I WOULD LIKE TO DISCUSS SOME OF OUR OTHER FIELD ACTIVITIES.

TAMPERING

PRODUCT TAMPERING CONTINUED TO BE A PROBLEM FACING FDA IN 1987, ALTHOUGH THE TOTAL NUMBER OF TAMPERING COMPLAINTS WERE SIGNIFICANTLY LESS IN 1987 THAN IN 1986 (ROUGHLY 700 COMPARED TO 1,700). WHILE MANY TAMPERING COMPLAINTS TURNED OUT TO BE UNSUBSTANTIATED, FDA INVESTIGATORS WERE OBLIGATED TO RESPOND QUICKLY AND DECISIVELY TO EACH POTENTIAL CASE TO ASSURE PUBLIC HEALTH PROTECTION. IN ADDITION, FDA PARTICIPATED WITH INDUSTRY, THE MEDIA, AND LAW ENFORCEMENT AUTHORITIES TO DEVELOP PUBLIC EDUCATION CAMPAIGNS TO

REMIND THE PUBLIC TO WATCH FOR TAMPERED PRODUCTS, AND TO REMIND WOULD-BE TAMPERERS THAT TAMPERING OR THREATENING TO TAMPER IS A FEDERAL CRIME.

INVESTIGATING ILLEGAL STEROIDS

IN 1984, FDA BEGAN INVESTIGATING THE ILLEGAL DISTRIBUTION OF ANABOLIC STEROIDS, ANDROGENIC HORMONES, AND OTHER HUMAN AND VETERINARY DRUGS BEING USED BY ATHLETES TO PROMOTE INCREASES IN MUSCLE TISSUE DEVELOPMENT AND STRENGTH. IT WAS SOON RECOGNIZED THAT THE PROBLEMS OF ILLEGAL DISTRIBUTION AND ILLEGAL USE WERE WIDESPREAD AND OTHER GOVERNMENTAL RESOURCES WOULD BE REQUIRED TO EFFECTIVELY COMBAT WHAT WAS VIEWED TO BE AN EPIDEMIC.

FDA HAS ACCORDINGLY PLAYED THE LEAD ROLE IN A COLLABORATIVE EFFORT WITH THE FBI, U.S. CUSTOMS SERVICE, AND THE INTERNAL REVENUE SERVICE TO INVESTIGATE ILLEGAL STEROID DEALERS ACROSS THE COUNTRY. AS A RESULT OF THESE EFFORTS, AT LEAST 56 INDIVIDUALS HAVE BEEN NAMED AS DEFENDANTS IN CRIMINAL PROSECUTIONS, 28 PERSONS AND 1 CORPORATION HAVE BEEN FOUND GUILTY OR ENTERED GUILTY PLEAS, AND OVER $7 MILLION WORTH OF ILLEGAL STEROIDS HAVE BEEN SEIZED. IN JULY, 1987, A 110-COUNT INDICTMENT WAS RETURNED BY A FEDERAL GRAND JURY IN SOUTHERN CALIFORNIA CHARGING 34 INDIVIDUALS AND 2 CORPORATIONS WITH A VARIETY OF OFFENSES.

FIELD ENFORCEMENT STRATEGIES

A MAJOR ELEMENT OF FDA'S ACTION PLAN IS TO IMPROVE OUR ENFORCEMENT STRATEGIES TO MAKE THE BEST USE OF OUR FIELD RESOURCES--TO DIRECT OUR EFFORTS TOWARD THE MOST LIKELY VIOLATIONS AND HEALTH RISKS, AND TO ENHANCE OUR ABILITY TO TAKE SWIFT ACTION WHEN LEGAL ACTION IS NECESSARY. DURING 1987 WE IMPLEMENTED A REVISED INSPECTION STRATEGY FOR FOOD ESTABLISHMENTS IN THIS COUNTRY, IN ORDER TO DIRECT PRIORITY INSPECTION COVERAGE TO FIRMS WITH VIOLATIVE

HISTORIES. BASED ON EXTENSIVE ANALYSIS OF SIX YEARS' WORTH OF INSPECTIONAL DATA, THIS EFFORT WILL PROMOTE COMPLIANCE AMONG THESE DOMESTIC FIRMS, WHILE AT THE SAME TIME FREEING RESOURCES FOR INCREASED COVERAGE OF IMPORTED FOODS.

IN SEVERAL INSTANCES IN THE RECENT PAST, FDA HAS TAKEN ACTION TO REMOVE CONTAMINATED FOODS FROM CONSUMER CHANNELS WITHIN 10 DAYS OR LESS AFTER CONFIRMING THE EXISTENCE OF VIOLATIONS. WITHIN THE LAST YEAR, FOUR SEPARATE "MASS SEIZURES" HAVE BEEN MADE OF ALL SUSPECT FOODS STORED AT FOUR VARIOUS LOCATIONS. THESE PRODUCTS HAVE TOTALED MORE THAN $3 MILLION IN VALUE. THESE 4 ACTIONS HAVE BEEN POSSIBLE BY AN EXPEDITED PROCESS WHERE FDA INVESTIGATIONS HAVE DOCUMENTED GROSS INSANITARY CONDITIONS BY PHOTOGRAPHS OR OTHER EVIDENCE. THE DOCUMENTS ARE THEN "HAND-CARRIED" BY FDA DISTRICT PERSONNEL THROUGH FDA HEADQUARTERS COMPLIANCE, SCIENTIFIC, AND LEGAL REVIEWERS, AND ELECTRONICALLY TRANSMITTED BACK TO THE DISTRICT OFFICE FOR HAND-CARRYING TO THE U.S. ATTORNEY. WHILE PROCESSING THE FEDERAL ACTION, FDA DISTRICT OFFICES OBTAIN VOLUNTARY HOLDS OR STATE "STOP-SALE" ORDERS TO PREVENT SUSPECT PRODUCTS FROM BEING DISTRIBUTED. IN THIS WAY, FDA HAS ASSURED PROMPT CONSUMER PROTECTION BY IMMEDIATELY REMOVING CONTAMINATED FOODS FROM THE MARKET.

THE FIELD ALSO PLAYS A VITAL ROLE IN OUR EFFORTS TO COMBAT AIDS. OUR INSPECTION OF BLOOD BANKS AND PLASMA CENTERS ENSURES THE SAFETY OF THE NATION'S BLOOD SUPPLY, AND THE FIELD WILL BE DOUBLING ITS EFFORTS THIS YEAR TO SEE THAT ALL SUCH FACILITIES UNDER FDA'S JURISDICTION ARE INSPECTED AT LEAST ONCE A YEAR. IN ADDITION, DURING 1987 WE INTENSIFIED OUR INSPECTION AND TESTING OF CONDOMS WHICH RESULTED IN 19 RECALLS OF CONDOMS FROM DOMESTIC COMMERCE AND AUTOMATIC DETENTIONS OF CONDOMS FROM NINE FOREIGN FIRMS. THIS EFFORT WILL CONTINUE IN 1988 AND BE EXPANDED TO INCLUDE INSPECTIONS AND TESTING OF SURGICAL AND EXAMINATION GLOVES.

As I mentioned earlier, we are also working to enhance our Field laboratory capacity and make the best use of some new facilities that are coming on line, to improve our product testing capabilities. In addition to the investigators and laboratory analysts that are our most vital resource, our Field laboratories are the nationwide base we must have in place to react to national needs and respond to problems such as pesticides, lead and other heavy metals in both foods and containers used for food, cyanide analysis as in the Tylenol and related incidents, condom testing, and needs for testing for disease hazards such as Listeria and Salmonella. Biotechnology will have a major impact on all product areas regulated by FDA, requiring Field staff to keep our inspection and testing practices up to the state of the art.

Summary of 1989 Request

Now let me conclude by recapping and summarizing a few points about our 1989 request. First, let me point out that our 1989 request is not based on an assumption that new user charges will support FDA's budget in FY 1989 consistent with the Bipartisan Budget Agreement. While the Administration still supports the concept of user charges, our request for budget authority will support the current level of program operations, and selected program increases, through appropriations.

Second, the Administration is proposing that all PHS activities related to AIDS be funded through a new consolidated account for AIDS research, education, and prevention activities under the Assistant Secretary for Health. This mechanism is intended to increase the coordination of AIDS programs and the flexibility to direct resources to the most pressing needs as our knowledge of AIDS increases. Of the total requested of $1.3 billion for AIDS activities, the planned allocation to FDA includes $40.4 million

FOR FDA PROGRAMS IN THE AREA OF DRUG REVIEW, DEVELOPMENT AND EVALUATION OF VACCINES, DEVELOPMENT AND EVALUATION OF SCREENING TESTS FOR DIAGNOSIS AND OTHER ACTIVITIES TO PROTECT THE NATIONAL BLOOD SUPPLY, AND OTHER RELATED FDA ACTIVITIES IN THE AREAS OF MEDICAL DEVICES AND INVESTIGATIONS OF FRAUDULENT PRODUCTS. THIS INCREASED FUNDING FOR AIDS INCLUDES RESOURCES TO DOUBLE OUR STAFFING FOR AIDS ACTIVITIES TO A TOTAL OF 254 STAFFYEARS.

THE OTHER COMPONENT OF THE COMBINED PHS REQUEST FOR AIDS THAT IS PLANNED FOR FDA IS $25 MILLION FOR A NEW BUILDING TO HOUSE MOST OF FDA'S LABORATORY WORK ON AIDS. THE MAJORITY OF FDA ACTIVITIES RELATED TO AIDS ARE LOCATED IN TWO BUILDINGS AT THE NIH CAMPUS WHICH HOUSE FDA'S BIOLOGICAL PRODUCT LABORATORIES, AND THESE FACILITIES ARE ALREADY BEING STRETCHED WELL BEYOND THEIR CAPACITY. CURRENT STAFFING IN THESE TWO BUILDINGS EXCEED THE ORIGINAL DESIGN BY MORE THAN 100. THE NEW FACILITY PLANNED WILL PROVIDE STATE-OF-THE-ART LABORATORY SPACE CRITICALLY NEEDED FOR FDA'S APPLIED RESEARCH ON AIDS IN SUPPORT OF THE AGENCY'S BASIC REGULATORY RESPONSIBILITIES. THIS FACILITY IS ESSENTIAL FOR FDA TO MAINTAIN CURRENT KNOWLEDGE AND EXPERTISE ON RESEARCH THAT CONTRIBUTES TO AIDS THERAPIES/VACCINE/PREVENTION, AND TO AVOID THE POSSIBILITY THAT FDA COULD BECOME A BOTTLENECK IN THE TESTING AND MARKETING OF PROMISING PRODUCTS.

EXCLUDING THE SEPARATE REQUEST FOR AIDS FUNDING, THE REQUEST FOR FDA TOTALS $468.5 MILLION, AN INCREASE OF ABOUT $16 MILLION OVER THE COMPARABLE AMOUNT FOR 1988. THIS INCREASE INCLUDES ABOUT $11 MILLION FOR PERSONNEL AND OPERATING COST INCREASES, AND ABOUT $5 MILLION FOR THREE TARGETED PROGRAM ENHANCEMENTS, WHICH I HAVE MENTIONED EARLIER. TO RECAP, THESE INCLUDE $2.8 MILLION AND 41 STAFFYEARS FOR INCREASED SURVEILLANCE OF IMPORTED FOODS AND DEVELOPMENT OF TESTING METHODS, $1.0 MILLION AND 16 STAFFYEARS FOR CONTINUED IMPROVEMENT OF OUR REVIEW OF NEW DRUGS, AND $1.1 MILLION AND 18 STAFFYEARS TO CONTINUE ENHANCEMENT OF OUR REVIEW OF NEW

MEDICAL DEVICES. THESE INCREASES WILL SERVE TO BUILD UPON AND EXTEND THE GAINS WE HAVE ALREADY MADE IN THESE IMPORTANT EFFORTS TO PROTECT THE PUBLIC HEALTH AND EXPEDITE THE INTRODUCTION OF NEW MEDICAL DISCOVERIES.

MR. CHAIRMAN, THIS CONCLUDES MY PREPARED REMARKS. I WOULD BE HAPPY TO RESPOND TO ANY QUESTIONS YOU OR THE OTHER MEMBERS MAY HAVE.

BIOGRAPHICAL SKETCH

DR. FRANK E. YOUNG

Frank E. Young, M.D., Ph.D., Commissioner of the Food and Drug Administration, was born in Mineola, New York in 1931 and educated in Union College, the Medical Center of the State University of New York (M.D., Cum Laude) and Case Western Reserve University (Ph.D.). After internship and residency in Pathology in University Hospitals in Cleveland, Ohio, Dr. Young served on the Faculty of Case Western Reserve University (1962-1965), Scripps Clinic and Research Foundation (1965-1970) and University of California at San Diego (1967-1970). In 1970 he became Chairman of the Department of Microbiology and Professor of Microbiology, of Pathology and of Radiation Biology and Biophysics at the University of Rochester, Rochester, New York. Concurrently he directed the Clinical Microbiology Laboratories for Strong Memorial Hospital and the County of Monroe. Subsequently he was appointed Dean of the School of Medicine and Dentistry and Director of the Medical Center of the University of Rochester (1979-1984) and Vice President for Health Affairs (1981-1984). Additionally he served as Chairman of the Executive Hospital Committee of Strong Memorial Hospital (1979-1984), Chairman of the Medical Advisory Committee, Monroe Community Hospital (1979-1984) and Pathologist, Strong Memorial Hospital (1974-1984).

While Commissioner of FDA Dr. Young participated as a Member of the U.S. Delegation to the World Health Assembly in Geneva, Switzerland, 1985; lead the U.S. Delegation to the Third U.S.\Israeli Symposium on Health, Jerusalem, 1985, participated in the Conference of Experts on the Rational Use of Drugs, Nairobi, Kenya, 1985; and Headed the State Department Delegation to the Ad Hoc Biotechnology Working Group of the Organization of Economic Cooperation Development, Paris, France, 1985, which resulted in the negotiation of an international agreement in Biotechnology. Dr. Young's area of research is biotechnology including the fundamental genetics of pathogenic and non-pathogenic bacteria. These studies were supported by grants from the National Institutes of Health, National Science Foundation, American Cancer Society, and industry. He has received numerous awards including membership in the Institute of Medicine of the National Academy of Sciences, the Edward Mott Moore Award for the outstanding physician from the Monroe County Medical Society, honorary degrees from Roberts Wesleyan College (Doctor of Science, 1983), Houghton College (Doctor of Science, 1984), State University of New York (Doctor of Science, 1986) and was a member of ten scientific societies. He has served on NIH advisory committees, including the Recombinant DNA Advisory Committee (1979-1980), the Microbiology Training Study Section (1972-1973), the Bacteriology and Mycology Study Section (1975-1979), and was Chairman of the Microbial Genetics Study Section (1981-1982). He also was a member of the Scientific Advisory Committee for Virology and Cell Biology Study Section of the American Cancer Society (1974-1979).

He and his wife Leanne have five children.

STATEMENT OF SENATOR COCHRAN

Senator BURDICK. The Senator from Mississippi.

Senator COCHRAN. Thank you very much, Mr. Chairman. I would first like to ask that a copy of a short statement of mine relating to the Commodity Futures Trading Commission be included in the record at the appropriate place.

Senator BURDICK. Without objection.

[The statement follows:]

STATEMENT OF SENATOR COCHRAN

Dr. Gramm, I welcome you to this hearing.

The Commodity Futures Trading Commission [CFTC] faces a period of great challenge in the next several months and years in fulfilling its mission of overseeing a constantly changing and expanding industry. In order to cope with that growth of the futures industry, the 1989 budget of the CFTC includes a request for 27 additional staff-years and an increase in operating costs.

I understand, Dr. Gramm, that CFTC is and has been in the process of analyzing the October 1987 market break, as well as ongoing interagency coordination activities, and that some reallocations of staff-years may be necessary. I hope you will tell us if you are comfortable with the requested increase of $2,734,000 over the 1988 level and if you feel it will cover changes or adjustments that will be required.

I commend you for the excellent way you have worked to take charge of the Commission and ensure that it quickly responds to the challenges it faces.

BUDGET REQUEST

Senator COCHRAN. Mr. Chairman, I am very happy to join you this morning in welcoming Dr. Frank Young to our committee. I think he has provided very effective leadership as Commissioner of the Food and Drug Administration. I commend you for that, Dr. Young.

Dr. YOUNG. Thank you, sir.

Senator COCHRAN. I think you and your staff are doing an excellent job.

I am also very pleased to note that the FDA budget request, which was submitted to the committee for review this year, contains some encouraging provisions. It specifically provides an increase for some staff positions to help deal with the increasing problems and responsibilities that our country faces in food safety and in new drug and medical device reviews.

I see that a request is made for an expansion of FDA's work to deal with the problem of AIDS, which you touched upon in your testimony, as well as a new facility on the National Institutes of Health campus to house this work. And I'm also pleased to note that your budget doesn't propose any user fees this year. That is an encouraging fact.

Dr. YOUNG. Yes, sir.

Senator COCHRAN. I am, frankly, very pleased with the request, and I assume that you must feel good about it, too.

BLOOD SAFETY

Dr. YOUNG. Yes, I do. The only concern that I do have is the emergencies that we see in AIDS periodically. As you know, we had the problem with blood banks. I noticed in yesterday's press that the director of the blood bank that we reviewed in Tennessee was fired. We have increased our surveillance, doubled it, so we are now looking at the blood banks every year and testing very, very vigorously to be sure that there are no human errors.

In those cases, Senator Cochran, regretfully, I have had to recommend increases even beyond the budget, and I am pleased that the Assistant Secretary, I believe, is considering this favorably, as well as the Secretary.

Those kinds of things I cannot predict. If it meets with congressional approval, I will try to do the best that I can medically and rely on the administration and Congress to provide the resources when emergencies occur.

Senator COCHRAN. I think what you are doing and what you are requesting in terms of additional funding is clearly justified. As a matter of fact, on my way to this hearing, I was reviewing the calendar on what we have coming up on the floor of the Senate. After we complete action today on the legislation dealing with campaign finance reform, we are turning to a bill on AIDS.

Dr. YOUNG. Yes.

Senator COCHRAN. I haven't had an opportunity to read all the provisions of that legislation, but I would just suppose, without having read it, that we would probably do more to deal with that problem by increasing the appropriation for the Food and Drug Administration and letting whoever is involved in bringing this bill to the floor join us at a news conference to help claim credit for it. We could then just put aside the bill that we are taking up today and let you get about the work that you are doing.

Dr. YOUNG. I appreciate that, because it is a severe problem. For example, one of the things that we are struggling with is the ability to get the appropriate number of folks, and I have been trying to think of imaginative ways, such as training grants. I was, as most of the members sitting on your committee, sir, of World War II vintage, and the way we staffed a medical emergency was to have a team from the various medical centers go over. There was a Harvard medical unit that went to the European theatre; the Wisconsin unit that went to the New Guinea theatre; and I am trying to develop some way that we could, through training and facilities, get both faculty and young physicians involved in reviewing these applications, because I am terribly afraid of not meeting this commitment.

The private sector is responding; they are contributing well over 50 percent of the research. We can't fail to be able to review those applications.

Senator COCHRAN. Thank you. I have other questions, but I think, Mr. Chairman, in view of the fact that we are going to have a vote over on the floor in just about 15 minutes, I am going to refrain from asking those questions. I will submit them for the record and defer to other Senators who are here today.

Dr. YOUNG. Thank you very much, sir. It is a pleasure to work with you.

FOOD SAFETY

Senator BUMPERS. Dr. Young, there seems to be an anomaly in the law dealing with food safety. FDA is charged with responsibility for inspecting fish; is that correct?

Dr. YOUNG. We have a major responsibility in regards to seafood, and we do have the responsibility in regards to certain fish products absolutely, particularly shellfish. But we do have that responsibility.

Senator BUMPERS. What percentage of the fish that goes to the fresh market would you say you inspect?

Dr. YOUNG. Regretfully, sir, we have the resources to inspect very little at this time.

Senator BUMPERS. It is an interesting thing. They are always jumping on the poultry industry. Every chicken is inspected, and I have pointed out many times less than 15 percent of the fish consumed in this country is inspected.

Dr. YOUNG. It is far less than 15 percent. I think you are severely disadvantaged.

Senator BUMPERS. I appreciate that, and hope the record will put that in bold letters. [Laughter.]

Dr. YOUNG. I have been particularly worried, Senator, because unlike the chickens, which you contain and can follow their feed, the fish, save fish farms, are wild, and they are collected in boats at sea. Interestingly, a large number of them are imported into the United States. Unlike our own factories, which we can have some degree of oversight on, some of the others are turn-of-the-century technology, and a lot of microbial problems exist. The Department of Agriculture and we are chairing a group on microbial safety. As you know, that is my background.

Senator BUMPERS. Yes.

Dr. YOUNG. We found, in certain shellfish, for instance, listeria that far exceeds that in the milk supply. We are very concerned about it.

Senator BUMPERS. I know I have been sick from fish. As far as I know, I have never been sick from chicken.

Dr. YOUNG. You do have a higher likelihood of being stricken by fish, to the best of my knowledge, and one of our dilemmas, sir, is compared to the Agriculture Department's almost 10,000 inspectors, the Food and Drug Administration has only 850 inspectors, and we would like to do as good a job as we could on fish.

Senator BUMPERS. Dr. Young, just for the record, if I am not mistaken, the last year we had full figures for fish imports was in 1986. I saw a figure the other day, and I am not asking you to comment on this figure, but it was shocking to me. We, in 1986, imported 7.3 billion dollars' worth of fish into this country.

Dr. YOUNG. Yes. To the best of our knowledge, your figures are correct, and it is over 50 percent imported. If you don't count Alaska, about half of the fish is imported into the United States. I was surprised at that myself, and again, you saw me focus on imports.

Senator BUMPERS. If we could give catfish a good sexy name, we could stop that. People would eat it in great quantities.

Dr. YOUNG. I want you to know, my daughter now lives in Baton Rouge, and I get a good chance periodically to get down and have it. It is a good product.

Senator BUMPERS. You have appreciation for the most delicious and nutritious fish in America, and that is catfish.

BIOTECHNOLOGY

Dr. Young, let me also tell you one other thing of interest to me and get your comments on it. Senator Leahy has been out front on this whole idea of biotechnology, and I share his concerns about it. Senator Kennedy and I collaborated on setting up and funding a biomedical ethics commission, but because of the abortion issue, we have had a terrible time getting that commission functioning. It is really tragic, because I think it could serve a great purpose. Its need will grow as biotechnology increases.

I am told that this is just about the fastest growing industry worldwide, and I am also told that the Japanese are just eating us alive; that last year the MITI Group in Japan came out with something like 66 patentable or maybe marketable biotech products, and we came out with one.

We have Genentech; we have a whole lot of big biotech firms, and apparently, we have hundreds of smaller biotech firms. One of my real concerns is whether we are going to get left in the starting blocks again on this whole field of biotechnology.

Dr. YOUNG. I surely hope not. As you know, Senator, my field is in genetic engineering, and one of the greatest challenges, almost 4 years ago, was when I was talking with Secretary Heckler about the opportunity to deal with this. I just led the American delegation to the OECD meeting, and if I could go back to that food chart and then go through the other biotechnology charts that I didn't have time for, I think I can show you the dimension of the problem and some of the issues that are facing the United States.

I think it is clear to state that in the United States, we invented the technology. I was one of the 150 at the Asilomar, California Conference in 1974 when we decided whether to go forward or not with that technology. We had people from 18 countries, but no one was doing that anywhere else around the world.

I also, a few years ago, in my other life, while I was still dean, went to a company in Japan as part of a lecture that I was giving, and I was informed that they felt that they were behind then, but in 5 years, they expected to be competitive, and a short time after that, they were interested in being a leader on this. This is a study that was conducted by

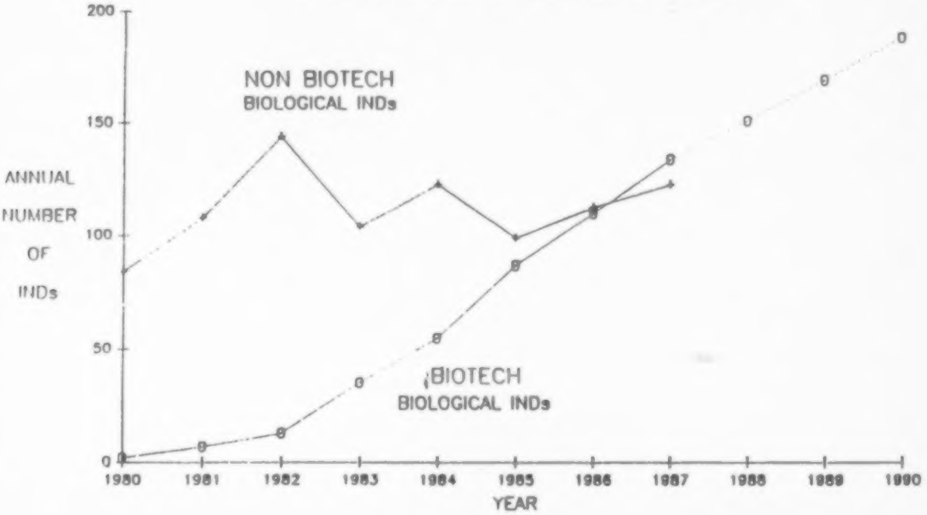
Mr. Barkdoll, who is in the room here, in which we surveyed 106 experts and began to look at what products are likely to come into the market. I thought since this was an Agriculture Subcommittee, I would first show you the food products,

When I was at OECD with 24 other nations, the nations concurred that food products are likely to be hitting the market in the very early nineties. You can see the prediction by experts of the accumulated food biotechnology advances.

All of this will come to nought if we are not prepared in the Food and Drug Administration to determine what needs approval and what doesn't; and then with those that need approval to be able to act on them with dispatch. I look at this need just as it is with AIDS: If we go to the 2- to 3-year approval, we are going to see a number of these very small firms that we are interested in go belly up.

In biologics, it is even more significant. We have been fortunate in the Food and Drug Administration. Unlike the other products, we have been able to approve in excess of 300 biotechnology products. About eight of these are medicinal.

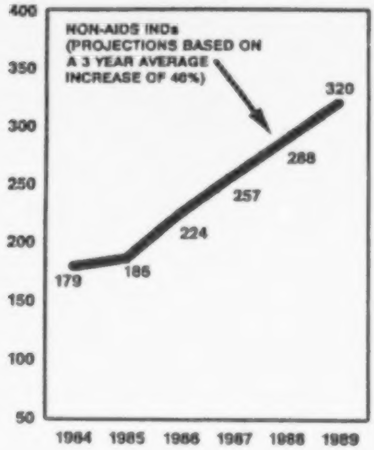
SUBMISSIONS OF BIOLOGICAL INDs



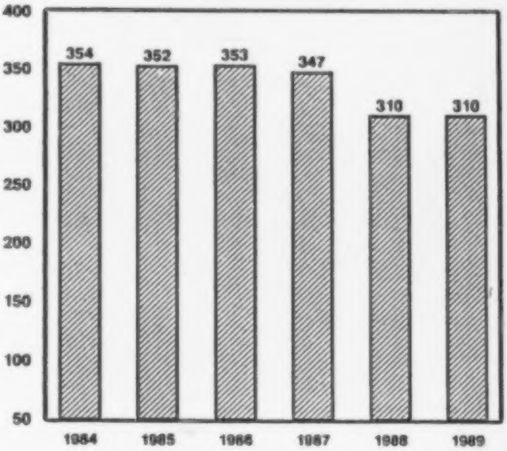
But if you look at the nonbiotechnology investigations in new drugs, they have stayed relatively constant over the period of time. From 1980 to 1990, you can see this marked increase in biotechnology.

There is another graph that I have that shows the resource issue in regards to the development of people to review the non-AIDS drugs. This graph shows that the average increase is the same over the period of time, our resources to evaluate these products in the field of biologics have, in fact, decreased by almost 12 percent.

BIOLOGICS NON-AIDS INDs RECEIVED PER YEAR



FTEs DEVOTED TO NON-AIDs BIOLOGICS ACTIVITIES



I think that answers one of the first parts of how it gets to the market. But that, in itself, isn't sufficient. Somehow, we have to stimulate small companies, in my opinion, to really get a leg-up; to be able to go into facilities and into areas where they can have an opportunity to get started without a high degree of expense. So we have got to stimulate the innovation. We have surely stimulated the research; NIH has funded it for a quarter of a century. Now we have got to start bringing it into the market; then we have to develop a small business approach so we can help guide these folks through the regulatory maze.

NCTR COLLABORATIVE RESEARCH

Senator BUMPERS. You have hit a nerve there, because that is precisely what I wanted to talk about. I really regret that we have a vote coming up here in a few minutes, because this is something I feel strongly about. I know you are one of the lead advocates of biotechnology in this country.

Let me just say that one of the things that I am thinking about, and I'd like your comments about this: Is there room for the government to get involved in a fairly significant effort to bring the private and public sectors, and academia and biotechnology together, if not under one roof, under one or two roofs, where at least the smaller people who can't afford the kinds of equipment they have to have maybe could lease space or buy testing facilities? You know, we have had this magnificent NCTR facility in Arkansas.

Dr. YOUNG. Yes, sir.

Senator BUMPERS. Most people don't realize what a tremendous technological operation that is, where we test virtually everything we use in this country.

Dr. YOUNG. It is an outstanding facility.

Senator SASSER. NCTR facility?

Senator BUMPERS. National Center for Toxological Research.

Senator SASSER. I see.

Senator BUMPERS. We also have a facility down there, a building. We have a 400,000-square-foot building that I understand would cost a fortune to build today that is not being used. I am not suggesting that we just do that out of hand, but I am thinking that NCTR would be a perfect place to consider using that facility.

Before we do that, I just wanted to ask you: Does this whole idea of bringing these biotechnicians, biomedical or whatever technicians under one roof where they can collaborate, have merit, in your opinion?

Dr. YOUNG. Yes, sir, I think it does. One of the things that limits the smaller companies and the bigger companies, as well, is having state-of-the-art technology available and appropriate animal and feed facilities.

You hit, I think, on a major key, because if you are going to keep state-of-the-art, you have got to be able to sequence DNA, synthesize DNA, have the appropriate probes, the mass spec; all of this is very expensive equipment. You also need, in my opinion, to be on the cautious side, just as NIH did with the NIH guidelines.

Therefore, the availability of high containment space is really important. Fortunately, the facility that you spoke of was built for a large amount of containment space.

Senator BUMPERS. Are you familiar with that space down there?

Dr. YOUNG. Yes, sir; I have visited it many times. It is in the Food and Drug Administration, so I have been down there. Dr. Hart has done an excellent job in the administration of that center. It is a very productive center.

Senator BUMPERS. I understand that a building with a high degree of containment for the kind of service I am talking about could run as high as $1,600 a square foot for construction. Am I misinformed, or is that a fair statement?

Dr. YOUNG. The space is very high in cost. I don't know the exact dollars per square foot, but since we are paying about $330 per square foot for regular lab space, I think that your figures may be correct in some cases.

Some space is already prebuilt at NCTR, where some recent lab renovations have cost about $240 per net square foot. There is a concrete building, that is a very substantial building. More importantly, the equipment can then be used by multiple individuals, and the great universities in that region could have a very important role. I think if we don't bring together universities, industry, and government we have missed in translating some of the basic sciences.

As a scientist, I think we have got to develop it here, not just invent it here.

Senator BUMPERS. Dr. Young, I can't tell you how much I appreciate your comments, because I think this is one thing the Japanese are doing. It is the reason they are getting ahead of us in biotechnology, and it is a place where I think we can catch up in a hurry if we really get at it. I certainly appreciate your comments.

Mr. Chairman, with deference to the other members and the vote coming up, I will submit some additional questions to Dr. Young on this subject in writing.

FOOD IRRADIATION

Senator BURDICK. As long as the Senator from Arkansas has put in a plug for catfish, I would like to say something about North Dakota wheat for the record. [Laughter.]

Dr. YOUNG. I want you to know, sir, that one of the products that is looked at in dealing with biotechnology is to develop resistant forms of wheat. [Laughter.]

It is a very major factor. One of the things that could be done now is introduce a wide variety of genes within plants. Because it is my field of science, and I love to talk about it, I would be happy to give a briefing to the committee anytime.

Senator BURDICK. You understand I stumbled on this, but I would be glad to talk to you.

The Senator from Tennessee?

Senator SASSER. Thank you, very much, Mr. Chairman. Dr. Young, I get a number of concerns coming from my constituents about the whole question of food irradiation.

Dr. YOUNG. Yes, sir.

Senator SASSER. I don't want to get into the pros and cons of it, because I am not that well versed on it. Is the Food and Drug Administration beginning a study on the whole question of food irradiation?

Dr. YOUNG. Yes; we have done a number of things. In one area, we have, product-by-product, approved some food irradiation. And more recently, we have promulgated a regulation that suggested that very low levels of radiation can be used in a number of products and not pose any particular hazard. The product must be clearly labeled, but at the level we recommended, there was no indication of any unique radioactive products that would be harmful to health.

I must say that the field of radiation is very controversial. I think people feel two things: First, that the radiation makes the food radioactive, which is not true; second, it produces unique breakdown products.

I must say, seeing the 4,000 comments on our regulation, I am very pleased that I was not the Commissioner who had to approve cooking. I don't think it would have ever passed. [Laughter.]

Senator SASSER. Thank you, Dr. Young.

Senator BURDICK. The Senator from Iowa, do you have some more questions?

Senator GRASSLEY. Yes; I haven't participated in the questions yet.

Senator BURDICK. Go ahead.

BIOTECHNOLOGY

Senator GRASSLEY. Commissioner, I would like to follow up on where Senator Bumpers left off and not go over any of that ground, but only direct you toward whether this is a specific problem affecting you.

This whole business of biotechnology, how is it going to affect your resource needs? Are you going to have sufficient personnel, for example, to do all those things that you should be doing with respect to biotechnological developments?

Dr. YOUNG. We are very concerned, sir. I must say, as we reviewed it in preparation for our action plan phase III, we recognize this as probably the dominant need. Even now, we are behind.

I don't have exact figures, but I can see that we are falling behind.

Senator GRASSLEY. So consequently, as a result of that, we will not be able to institute, to the benefit of the economy and our people, the advantages of biotechnology, right?

Dr. YOUNG. That is correct. We feel that in the past, we have been able to evaluate products in a 6-month period of time. Let me give you one example, TPA, which was a product that was involved in dissolving clots. It did have some controversy, but less than 8 weeks after the information was in, we were able to approve it.

Interferon for hairy cell Leukemia made a difference in survival from 50 percent to 95 percent of those people treated with that. That was done in under 6 months. We are now coming to the point where we really don't have the personnel to promise that type of approval, which I think is important for competitiveness in the United States.

BLOOD SAFETY

Senator GRASSLEY. In your discussion of your agency's activities, you described activities with respect to the blood supply. You noted that the FDA field staff are increasing inspections of blood banks from once every 2 years to an annual inspection.

Dr. YOUNG. Yes, sir.

Senator GRASSLEY. Of course, I think many of us have been under the impression that our blood supply was safe, if not perfectly safe, almost so. Why has the FDA felt the need to double its investment in the inspection of blood banks?

Dr. YOUNG. In our routine audits of the human error side of this, we discovered a number of problems. The two that were most recently written up was a blood bank in Washington, DC, and a blood bank in Nashville, TN. Fortunately, none of the products that were suspect were transfused into people, but seeing that and knowing the horror of this disease, I felt it incumbent to increase the inspection rate. We previously did it once every other year. I am also considering whether or not we can ask the technicians to perform the tests while our inspectors are there to quality control it. I would like to make sure during the inspection that the tests are being performed right, as well, and not just rely on quality control that is not directly observed.

I do believe the blood supply is safe as it can be made at this time. I would, however, like to be sure that a safe blood supply is made even safer by reducing human errors and making sure that the laboratory tests are done in a correct fashion and periodically under visual inspection of an inspector.

CLINICAL TESTING LABS

Senator GRASSLEY. In regard to these laboratories that are testing for HIV antibodies, does the FDA have any oversight role with respect to these laboratories, and if so, describe that role for me.

Dr. YOUNG. We have the license responsibility for blood banks, and the role that we have is an inspection of records. We go in and determine whether good manufacturing practices are being followed, and whether or not the records allow the blood to be traced.

When we did that survey, we found that some blood units could not be tracked; others were sent off for plasma processing that could have been labeled incorrectly. We now work very closely with the Red Cross in other places, and you see the Red Cross, in cooperation with FDA, really tightening their standards. We feel that is necessary.

We have not determined whether we have the authority to give unknown samples to the technicians in the blood bank and get their results in a blind test fashion. That is what I am exploring now.

Senator GRASSLEY. I didn't make clear my question. I was referring to the blood banks before, and then I moved on to the HIV antibody.

Dr. YOUNG. Oh, I am sorry. Excuse me.

Senator GRASSLEY. What is your authority in those labs?

Dr. YOUNG. In those laboratories, we license all of the blood testing procedures, the HIV testing procedures, and license the licensee, the western blot, et cetera. Once we license them, we do not have the authority to see whether the laboratories are implementing them correctly. Our authority stops with the license.

Senator GRASSLEY. OK. Then maybe the answer to the next question is, "No," because you don't have authority, but let me specifically ask: Do you contemplate any changes in your activities in this area that would enhance our confidence in the workings of these labs?

Dr. YOUNG. We are exploring now, and I will ask general counsel to comment, whether or not in the blood banks we can go in and give unknown samples. We do not have the authority that would enable us to go into other laboratories. But I must hasten to add that this is a grave diagnosis. We know of the concern of people for privacy; some people who have committed suicide unnecessarily because they had a false positive. I want to be sure as a clinical pathologist, clinical microbiologist, that those tests are done to the best of their ability.

Our authority stops in licensing. Tom, could you add to that?

Mr. SCARLETT. The Senator's question is directed to clinical testing labs. As the Commissioner observed, we do not have direct regulatory authority over those labs,

Senator GRASSLEY. Then I think the answer to my question is, that other than your present statutory authority, there aren't any actions you can take beyond that initial approval by which they get a license that would, in any way, assure greater confidence in the work of these labs.

Dr. YOUNG. That is right, save the blood banks. I must say that there is a voluntary program which has been used and has been effective. It is put out by the Association of the American Society of Clinical

Pathology. There is also a CDC program, which is a voluntary program, and Dr. Paul Reasoner has done an excellent job in putting that together. I thought your question was directed to mandatory quality control, and the answer to that is no.

Senator GRASSLEY. Mr. Chairman, I am going to submit the rest of my questions for an answer in writing. I do have quite a few to which I would appreciate an answer in writing.

Dr. YOUNG. We would be delighted to answer. If there is anything that I can brief you on personally, I would be happy to do so, sir.

EMERGENCY FUNDS

Senator BURDICK. Will FDA retain control over the funds, even if they are appropriated to the Assistant Secretary for Health?

Dr. YOUNG. I will do the best in my administrative role to be sure that the FDA's funds are secure. I feel very strongly about our responsibility, and I believe that the Administration is making a wise proposal, because it does provide a degree of flexibility that would be helpful in allocating funds in emergencies. As an example, we recently requested 69 FTE's for blood bank work.

BUILDING 29–A

Senator BURDICK. What is the purpose of the facility being located at the NIH complex? Who will own the building? Who owns the 29–A building?

Dr. YOUNG. Building 29–A came to the Food and Drug Administration as part of the transfer of the biologic unit from NIH to FDA. I have learned in my brief time in government that the ownership is by the public, and in the case of buildings on the NIH campus, it will be construction under NIH rules and guidelines.

It is owned by the U.S. government is the best way to say it.

Senator BURDICK. But as a practical matter, FDA will control it?

Dr. YOUNG. FDA will control it, and it will be used for the evaluation of AIDS-related products. Our being on the NIH campus is very important because we need collaboration with other scientists involved in research and it is an ideal location for our regulatory focus.

Senator BURDICK. Is the request for 127 additional FTE's for AIDS-related work the entire request for the AIDS scientists? Will FDA be requesting more staff next year?

Dr. YOUNG. That is not a request that will end this year. As I showed you on the curve, it will continue to increase, and I am sure that we need to keep abreast of this. The AIDS Commission said that there should be some sort of ratio between the number of applications coming in and the people to work on them. We don't have such a ratio, but I think that is going to be kept in mind.

I must also add only 50 of those 127 are destined to be at the NIH campus in the biologics building. We also are requesting a number of positions that will be used in drug review and a number in the field to make sure that the investigations are done correctly.

BUILDING 29-B

Senator BURDICK. How many staff scientists will be housed in the new facility at the NIH complex? Will there be enough room at the new 29-B building for them?

Dr. YOUNG. The real problem is that I have submitted this request for a few years, and we are a bit behind. When the building is built, it will be close to saturation, and that will pose problems for us. But our goal will be to convert every square inch of nonessential office space into research space so that we can house our immediate needs and our needs in the next few years. We may need to come back with other requests in the future depending on how this epidemic goes.

SIMPLESSE

Senator BURDICK. Has the NutraSweet Co. been working with FDA to assure that procedures guarantee the safety of this product, which is known as Simplesse?

Dr. YOUNG. Yes; that is correct. They have been working with this, with a little bit of a stormy start, where they felt that they did not need to have the product evaluated by FDA, but after some discussions, it was recognized that evaluation was necessary and it is now working very smoothly.

Senator BURDICK. Where is FDA in its process of evaluating the safety of Simplesse?

Dr. YOUNG. To my knowledge, the petition has not been completely filed, but let me ask Mr. Ronk. We are well along, but the complete application has not been filed yet.

Sir, could I return back to one question that you asked on space a moment ago?

Senator BURDICK. Sure.

SPACE FOR DRUG REVIEW

Dr. YOUNG. There has been a very appropriate focus on the space for the Center for Biologic Evaluation and Research, and that has been a key issue in locating on the National Institutes of Health campus. But I should also point out that the antivirals, the drugs for opportunistic infections and some of the immunomodulators are reviewed by the Center for Drug Evaluation and Research.

We are so extraordinarily tight there, that we just founded a new division on antivirals to recognize those needs. Dr. Peck, who is sitting behind me, has been desperately trying to find office space, and though we have the FTE's, we are not sure where the space will be for the almost 40 people for the new division.

The government has an interesting system where you get the people first and then you get the facilities, unlike when I was dean of the medical school, I could do two together. It seems that the system is such that you have to have people with no space and then you apply for space. Yet it is very hard to recruit under those circumstances. I wanted to point out that we are severely short of office space in the Center for

Drug Evaluation and Research, and I trust that you might be able to give us some consideration there.

Senator BURDICK. We used to call this, in the old days, the cart before the horse or something like that.

Dr. YOUNG. I think that is about it. It is awfully hard to push a cart effectively that way, particularly in war time.

CFSAN VACANCY

Senator BURDICK. Dr. Young, it is my understanding that the vacancy announcement for submission of applications for the position of Director for the Center for Food Safety and Applied Nutrition was extended beyond the February 29 deadline. What do you have to say about this? How many applicants are there? Give us the general rundown.

Dr. YOUNG. I would first like to say that I have great confidence in Mr. Ronk, who is serving as Acting Director, and Dr. Fred Shank, who is serving as Acting Deputy. I am trying to develop the search in the same fashion that we did for drugs when we were able to recruit an eminent clinical pharmacologist, Dr. Peck. The first thing that I did was to spend a substantial amount of time in the Center.

I would like to say for the record that I have been spending about 2 days a week in the Center for Foods, going over scientific programs and trying to understand where we must focus our efforts in the future. In that sense biotechnology is going to be a big part of it. We are looking at an innovative interaction in the north central states and other areas to try to develop facility interactions on that work.

In this process, we will collect a number of ideas, and recruit individuals to fill that need. We have approximately 40 applicants at this time. We may need to extend it further, because I want to get the very best appointment.

You know, Senator, this is an election year, and it is very hard to recruit from the outside at this particular time. The individuals coming in are nervous. I would like the discretion to wait the appropriate time and recruit an outstanding individual.

So the search is going slowly, but not really that much slower than it did with drugs and biologics. It is hard to be competitive with the salaries and some of the problems that we have here.

Senator BURDICK. It looks to me like in your part-time, if you have any part-time, you are part architect.

Dr. YOUNG. I am sorry, sir.

Senator BURDICK. You are part architect, trying to find space.

Dr. YOUNG. Yes, sir; I look at that as one of my key jobs, because you just can't recruit folks who are going to cut their salaries, sometimes as much as 50 percent, to come into space that is wholly inadequate. The Federal Office Building 8 is a poor facility. It is a facility that we have not been able to function out of well.

Part-time architect, I am, but I have the right to recruit; we need to have the right facilities. I would be happy to provide further information if necessary.

URETHANE

Senator BURDICK. On December 26, 1986, Newsweek magazine reported that an FDA official said the agency planned to set limits on urethane——

Dr. YOUNG. Yes, sir.

Senator BURDICK. A carcinogenic contaminant found in alcoholic beverages in 1987. A year later, FDA made voluntary agreements with liquor and wine producers setting targets for eliminating urethane in future production. Do these agreements, in effect, mean that FDA won't take regulatory action against products that comply with the target levels, and are these voluntary agreements legally enforceable? What will FDA do about beverages that don't comply with the target level?

Dr. YOUNG. First of all, we can take enforcement action if it doesn't meet the levels that were negotiated. The problem with urethane is that it is clearly a carcinogenic substance in animals, but we really haven't had a detailed study on its effects in man and whether and how it effects animals in the production of cancer.

We have asked for a National Toxicology Program review of this to get a risk assessment on it. In the absence of a good risk assessment, we felt the best way to go was a voluntary standard. We have, in the case of wine, lower amounts than the Canadian government established. In the case of whiskey, 125 parts per million was selected. It is a low number, but much of the whiskey is already in kegs. Rather than dump that on the ground, we felt it would be appropriate to apply the standards only to new development of liquor, and we have regulations that we are trying to now negotiate with foreign countries so that we don't have a disproportionate burden on the U.S. economy.

I believe the levels that we have established are the lowest levels that can be obtained at this time in a voluntary compliance, but we will monitor it carefully. I did promise the wine and liquor industry that if we could not reach the appropriate agreements, that I would consider holding a legislative type hearing to be sure that this is fully aired in public and we get the best possible scientific advice.

I don't think we are to a regulatory stage yet, and the voluntary approach, I believe, can be done more effectively at this time.

SUBMITTED QUESTIONS

Senator BURDICK. Thank you very much, doctor.

Other questions will be submitted by the following Senators: Senator Cochran, Senator Bumpers, Senator Sasser, Senator Grassley, Senator Kasten, and myself. I trust you will get them back in good time.

Dr. YOUNG. Yes, sir.

[The following questions were not asked at the hearing but were submitted for response for the record:]

QUESTIONS SUBMITTED BY SENATOR BURDICK

AIDS Research and Facility

QUESTION: The Fiscal Year 1989 budget submission included $65,420,000 in additional funding for AIDS research and a new facility at the NIH Complex. This funding is not included in the FDA budget, rather, it is part of the AIDS Research and Education account within the Office of the Assistant Secretary for Health. Will the 127 additional staff for AIDS research be working predominately on drug evaluations?

ANSWER: Most of these additional FTEs are to be assigned to drug and biological research and review of investigational and marketing applications for AIDS-related drug products as well as diagnostic tests and vaccines. The balance of this new staff is needed to work on other equally important areas concerned with the prevention of the spread of the AIDS virus; monitoring the safety and efficacy of condoms, surgical gloves, and inspections of blood banks and plasma centers.

QUESTION: Will this be a quarantined facility? Is it necessary that this facility be located at NIH?

ANSWER: The proposed new AIDS facility, to be known as Building 29B, will not be a quarantined facility. The biologics program is now located in two buildings on the NIH campus where support services are readily available to the laboratory, such as animals, animal food and bedding, central storeroom for laboratory supplies, and laboratory instrumentation assistance, among others. Expanding facilities at the present location would give the Agency′s scientists the continued opportunity to collaborate and hold discussions on a day-to-day basis with NIH scientists on the research and development of potential new vaccines, testing problems, etc. in dealing with AIDS.

QUESTION: Is there existing laboratory space that might be renovated to accommodate FDA′s research needs, in lieu of building a new facility?

ANSWER: The possibility of leasing additional laboratory space was considered, but there is no comparable or suitable laboratory space readily available in this area. The possibility of leasing additional office space in this area has also been considered, but the space made available by moving offices would only be a very temporary solution at best and would not provide enough space to satisfy the current need. Moreover, vacated office space would have to be extensively renovated before it could be used as lab space.

QUESTION: Would this reduce the cost for a facility?

ANSWER: When special purpose space, i.e., laboratory space, animal holding space, etc., is required, past experience has revealed that such space is rarely, if ever, available for leasing. FDA planning officials have contacted commercial and industrial real estate companies many times over the last 15 years in an effort to locate laboratory and animal holding space, but none of these efforts have succeeded in discovering suitable leased space that was more cost effective or readily available than new construction. Available space that may be categorized as "laboratory" almost inevitably needed almost total renovation to meet FDA needs. This is particularly true with the highly complex P-3 type of laboratory space needed for AIDS related work. Such renovations are almost always as costly as new construction, and take as long to design and build as new construction because so much retrofitting has to take place. Also, there is land adjacent to Building 29A on the NIH campus where a building addition can be accommodated. By constructing a new facility adjacent to this building, FDA saves the cost of purchasing land elsewhere to build the same facility.

QUESTION: What is the timeframe for building a new facility?

ANSWER: Design of the building addition would take almost 18 months. Bid advertising would take from four to six months and construction would require about 30 months. Therefore, beneficial occupancy of the building could occur about four and a half years after funds were made available.

QUESTION: Is the request for 127 additional FTE´s for AIDS-related work the entire request for AIDS scientists? Will FDA be requesting more staff next year?

ANSWER: While the majority of the additional FTEs are for scientists engaged in AIDS-directed research and review, the entire request is not for such experts since support personnel are also needed as well as Field investigators and laboratory analysts contributing to public health control efforts related to AIDS. The agency is currently engaged in assessing program priorities and resource requirements preparatory to the development of the fiscal year 1990 budget request. The question of whether additional staff will be needed for AIDS related activities will be considered within the context of overall competing budget priorities for FY 1990.

QUESTION: How many staff scientists will be housed in the new facility at the NIH complex? Will there be enough room at the new 29B building for them?

ANSWER: The new building would provide the Agency with 52,000 net square feet of usable space to house 100 laboratory personnel and 60 office-based personnel. This will enable FDA to house almost all of its Biologics AIDS-related laboratory staff very closely together.

QUESTION: The AIDS Commission recommended that FDA be given two separate buildings for AIDS research. Does FDA have plans to request another facility? Why or why not?

ANSWER: The Agency is reviewing the Commissioner's recommendations but the need for any additional facilities would have to be considered within the context of overall competing budget priorities and the agency's furture staffing needs.

QUESTION: If Congress were to add 127 FTEs for AIDS in 1989, where would these staff be located, particularly since I understand the 29A building is already overcrowded?

ANSWER: FDA plans to house about 50 of the 127 FTEs at its facilities on the NIH campus. FDA has already made drastic efforts such as converting some of the restrooms and walk-in freezers into office space to make room for additional staff in Building 29A on the NIH campus and will continue to make every effort possible to house more staff. The Agency is also considering other interim alternatives such as moving office staff and/or support functions to other locations to make laboratory space available there. The new building proposed in our 1989 budget would eliminate present overcrowding and provide space for the portion of the 1989 FTE increase to be located on the NIH campus.

An additional 20 FTEs will be located at various laboratories throughout our district offices. In the case of our Field offices, there is generally room to accomodate new staff.

Office space in the Parklawn Building, along with facilities in Silver Spring and Rockville, would be made available without major renovations and will involve continuing negotiation with PHS and GSA. This will house the remaining 57 FTEs.

Simplesse

QUESTION: Commissioner Young, early this year you corresponded with me regarding the development of "Simplesse," a product developed by the NutraSweet Company offering a fat substitution alternative. Apparently, the company has not received FDA clearance prior to announcement of "Simplesse." Where is FDA in the process of evaluating the safety of "Simplesse?"

ANSWER: Information presented in the form of a seminar to FDA by NutraSweet officials on February 10, 1988, and a letter from the company, dated March 22, 1988, are the only data available to the Agency on Simplesse. During the February meeting, NutraSweet officials presented a general overview of the organoleptic, physical, nutritional, and antigenic properties of Simplesse. At that meeting we informed the company that the process for evaluating a new food ingredient involves submission of a food additive petition or a petition for GRAS (generally recognized as safe) affirmation. FDA has not received a petition which can be used to evaluate the safety of Simplesse.

QUESTION: What protections will be available to egg-sensitive consumers once "Simplesse" is on the market?

ANSWER: Ordinarily the Agency would propose that an allergenic ingredient, and any food containing it, be properly labeled, so that anyone consuming it would be aware of its presence. Our conclusions with respect to Simplesse, however, must wait until the company submits the necessary data in the form of a petition.

Director of the Center for Food Safety and Applied Nutrition

QUESTION: Commissioner Young, it is my understanding that the vacancy announcement for submission of applications for the position of Director for the Center for Food Safety and Applied Nutrition was extended beyond the February 29 deadline. Have final applications been received?

ANSWER: The Agency is still receiving applications because the recruitment period has been extended to June 30.

QUESTION: Have you had an opportunity to review the qualifications of the applicants?

ANSWER: Yes, I have been kept apprised of those who have applied thus far.

QUESTION: How many applicants are there?

ANSWER: Out of 63 applications, there are approximately 40 who meet the minimum mandatory qualifications for the position.

QUESTION: When do you expect to send your endorsement to Secretary Bowen?

ANSWER: The closing date for applications has been extended until June 30, 1988. The Director of CFSAN is one of the most critical positions in the Agency. Although some of the applications received thus far warrant further consideration, I feel that the demands of the job and the needs of the Agency makes it imperative that we make a determined effort to find the best suitable candidate. Our search has been both formal and informal, designed to bring the Agency's needs to the attention of the widest possible audience. When we have completed our formal search, then I will be in a much better position to make a decision.

QUESTION: How long do you expect it will be before this position is filled?

ANSWER: This again depends on how soon we find the right candidate. Mr. Richard Ronk has done admirable job as Acting Director, and I have great confidence that he can carry out the duties until a final decision has been made.

Fiber Labeling

QUESTION: The fiscal year 1988 Senate and House Committee Appropriations Reports requested that FDA require stricter labeling on the source of fiber in reduced calorie breads. Apparently, there is some concern that the labeling of alpha cellulose can be misleading to the consumer. However, I am aware that there may be general concerns about the measures used for determining fiber content and the manner in which fiber claims are represented on food packages. Could you please explain for the Committee how fiber is measured in bread, cereal, and other foods?

ANSWER: Fiber is measured in all foods using a combination of enzymatic and gravimetric procedures. Samples of dried food are gelatinized with Termamyl, a heat-stable alpha amylase, and then enzymatically digested with protease and amloglucosidase to remove the protein and starch present in the sample. Four volumes of 95 percent ethanol are added to precipitate the soluble dietary fiber. The total residue is filtered, and then washed with 78 percent ethanol, 95 percent ethanol, and acetone. After drying, the residue is weighed. One of the duplicates is analyzed for protein, and the other is ashed at 525 C and the ash is measured. Total dietary fiber is calculated as the weight of the residue less the weight of the protein and ash.

QUESTION: Generally, what would you say is the most predominant measure of fiber employed by the food industry today -- crude fiber analysis or dietary fiber analysis? Which of these two methods is most accurate in depicting the actual fiber content of a product? What is the distinction between the two types of tests?

ANSWER: Crude fiber determinations obtained by the sequential extractions of plant food by ether, acid and alkali were developed in the early nineteenth century and in 1887 the method for crude fiber was adopted by the Association of Official Agricultural Chemists (AOAC). The analysis for crude fiber was favored at this time because it involved three easily obtained reagents and was reasonably reproducible. However, major fractions of the plant fiber such as hemicellulose, lignin, and even some of the cellulose, could not be measured due to their solubility in acid or in alkali. This crude fiber method was continuously applied for the analysis of foods and feeds for approximately 40 years and a large data base of values was developed, and only recently removed from FDA's regulations and has been replaced by a more sophisticated method capable of measuring the components of the fiber fraction. The term dietary fiber was generally applied to the fraction identified by this method.

The dietary fiber method, which is only two years old, received official status from the AOAC in 1986 and was accepted by the FDA in 1987, but in that time many foods have been labeled using the approved method. Almost all of the major manufacturers of fiber-containing foods including breakfast cereals and all products that have come to FDA for approval as GRAS or food additive status have referenced the AOAC method as the one used for the total dietary fiber determination.

QUESTION: Is there any relationship between the basis for fiber claims on packages and the type of fiber analysis used to measure fiber content?

ANSWER: In order for a fully accurate fiber representation to be made there must be three types of analysis: 1) a determination of total dietary fiber; 2) a determination of soluble and insoluble dietary fiber; and 3) a determination of the individual components of dietary fiber (hemicellulose, cellulose, pectin, lignin etc.). The only acceptable method at the moment, the total dietary fiber method, does not tell us anything about the amounts of soluble and insoluble dietary fiber and the amounts of the components present. Thus, there is only a general relationship between representations as to fiber on package labeling and the type of fiber analysis used to measure fiber content.

QUESTION: What are the sources of alpha cellulose? Are there any types of fibers besides alpha cellulose that are used in the production of bakery products that provide the same benefits? Are these other fibers the basis for claims made about the fiber content of bakery products?

ANSWER: Powdered cellulose, or ground alpha-cellulose, is purified, mechanically disintegrated cellulose prepared by processing bleached cellulose obtained as a pulp from fibrous materials such as wood or cotton. It occurs as a white, odorless substance and consists of fibrous particles that may be compressed into self-binding tablets that disintegrate rapidly in water.

This is the only type of fiber, with the exception of small amounts of bran, that is currently used in the production of bakery products. A number of new fiber products produced from a variety of sources are now being developed which include fiber from soy, sugar beets pulp, citrus pulp and other plants. The functional characteristics and safety of these products are currently being examined. The major claim for the addition of cellulose to bread products is the reduction of calories.

QUESTION: Will FDA be issuing regulations to require appropriate labeling of fiber levels in bakery and cereal products based on up-to-date and complete analysis? If so, when? If not, please explain why.

ANSWER: The FDA has been petitioned to include fiber labeling as part of nutrition labeling and this petition is currently being given careful consideration. FDA has been active in developing dietary fiber methods and conducting the collaborative studies necessary for verifying the accuracy of methods. A study now underway is expected to provide needed information. If successful, the data from this study may support the proposal for labeling of dietary fiber.

QUESTION: What is the current trend in food production -- to continue to use cellulose or to use other types of fibers?

ANSWER: The Agency is not aware of any published information about the current trend in the use of cellulose fiber in food production. The manufacturers and suppliers of cellulose fibers (for food uses) may have compiled such data, but would not ordinarily release the information due to its proprietary nature and marketing strategy. FDA believes that the use of microcrystalline cellulose in bakery products may be replaced partially by fibers prepared from peas, corn bran, soybean, cotton cellulose, and oats. However, the relatively small quantity of microcrystalline cellulose needed in food products (e.g., bread) has an advantage over other fiber ingredients because: 1) it does not change the taste and appearance of food products; and 2) it costs less per unit of final product.

Food Safety - Microbiological Hazards

QUESTION: Recent attention has focused on the problems associated with microbiological and chemical contamination and related foodborne illness. Some have suggested that the Food Safety and Inspection Service should engage in massive research and analysis to determine tolerance levels and methods for reducing contamination. Commissioner Young, what is your view of legislation that would mandate research to develop risk assessment techniques for microbiological contaminants and test method development by USDA? Do you believe that such research would duplicate work being done by FDA?

ANSWER: Microbial contamination may create serious public health problems. Accordingly, FDA and USDA recently formed a National Advisory Committee on Microbiological Criteria for foods to investigate problems associated with such contamination. FDA believes that the committee, which consists of experts from industry, academia and government, should be allowed to formulate recommendations before new massive research efforts are undertaken.

QUESTION: In what areas is FDA currently conducting research?

ANSWER: FDA is currently conducting research on foodborne biological hazards. Specifically FDA is investigating areas such as:

a. Detection of microbial hazards by methods such as genetic probes for virulence of toxic genes and immunoassay detection of virulence proteins;

b. Investigation of virulence mechanisms possessed by pathogens that are responsible for disease. This is inclusive of some chronic diseases as well as acute illness;

c. Conduct of safety evaluation of new food processing practices such as new thermal processing techniques and modified or controlled atmosphere packaging which extend shelf life of refrigerated foods; and

d. Monitoring the extent of newly recognized pathogens in the food supply and relationship to human disease.

QUESTION: How could research on foodborne illnesses and microbiological contamination be organized and divided between FDA and USDA to serve the American public in the most effective and efficient manner possible?

ANSWER: FDA suggests that each Agency center its research on the commodities that it regulates and on the particular problems unique to such commodities.

QUESTION: Please explain the authority FDA has with respect to fish inspections. Do you believe shifting these responsibilities to USDA would serve the best interests of the American consumer?

ANSWER: With the exception of meat, poultry, and eggs, which are regulated by the United States Department of Agriculture (USDA), FDA has regulatory responsibility over the safety of all food products including fish and fish products. Through our Center for Veterinary Medicine, FDA also regulates veterinary drugs used in food-producing animals, including fish and other aqua/mariculture animals, and for the safety of animal feeds. Examinations and investigations by personnel of the U.S. Food and Drug Administration are performed under authority derived from Sections 702, 703 and 704 of the Food, Drug, and Cosmetic Act and section 361 of the Public Health Service Act. Examination of exports and imports is conducted under Section 801 of the Act. This authority has been delegated to FDA by the Secretary of Health and Human Services. Section 702a of the Act provides for a fee-for-service inspectional program which is available to seafood packers. Although all food manufacturers and processors are subject to FDA inspection, seafood packers may apply for specific inspectional services under Section 702a, and if the food is found to be in compliance with the FD&C Act, the applicant for these services is authorized or required to mark the food to show such compliance. This provision was originally enacted as a means to encourage product improvement by the shrimp processing industry. At the present time, a limited fee-for- service inspection program is being conducted by the National Marine Fisheries Service's National Seafood Inspection Program under terms described in a memorandum of understanding (MOU) between FDA and the U.S. Department of Commerce. This MOU was approved by both agencies in 1974.

Under the FD&C Act, FDA also promulgates mandatory standards of identity, quality, and fill of container for food products after appropriate notices and public procedures.

Research support is critical to FDA in carrying out its mandate under the FD&C Act and other related laws. Consequently FDA has maintained a research program to identify potential hazards and to develop and validate analytical methods for detection and measurement of chemical and microbiological agents that may become part of food (including natural toxicants such as ciguatera and paralytic shellfish poison which are unique to seafoods). The

Center for Food Safety and Applied Nutrition has a very active research program to address the many public health problems associated with fish. This work is spread throughout FDA's scientific divisions in Washington, D.C.; Cincinnati, Ohio; Davisville, Rhode Island; and Dauphin Island, Alabama. The laboratories in Rhode Island, Alabama, and the Seafood Products Research Center in Seattle, under FDA's Office of Regional Operations, are devoted exclusively to work on fish and fisheries products. FDA's inspectional capability includes a system of 19 widely dispersed field laboratories with scientists and investigators to inspect facilities, to collect and to analyze samples, and to respond to emergencies, such as product recalls and product tampering.

FDA coordinates closely with CDC, utilizing CDC's epidemiology and medical knowledge with that of FDA in evaluating microbiological hazards. The Public Health Service agencies, within HHS' extensive ongoing research programs and health monitoring programs, provide help in determining the hazards to public health from the products we regulate. The National Institutes of Health have unparalleled capacities, for example, in the field of molecular virology, and CDC maintains expertise in the investigation of disease outbreaks and performs detailed medical analyses. These resources help us prevent and to reduce the incidence of foodborne disease, to reduce the considerable associated costs of the effort, and to increase the public's confidence in a safe food supply.

The actual on site activity of "fish inspection" is but one aspect of the overall structure required to protect the consuming public with respect to this product group. FDA would strongly object to the removal of this activity from its regulatory responsibilities.

QUESTION: In what ways does FDA work in concert with USDA to assure the safety and wholesomeness of meat and poultry products? How could these relations be improved?

ANSWER: The FDA and USDA have memoranda of understanding (MOU'S) concerning meat and poultry products. These MOU'S spellout the responsibilities of each agency to prevent duplication of efforts but they also require notification of the sister agency whenever violations of mutual interest are discovered or uncovered. Normally, this also leads to a decision as to which agency will act and a plan of action best to handle this matter.

The Agency believes this system works very well and we will continue to strive to coordinate effectively with FSIS. FDA does not have any specific proposals to improve our already established relationships with them.

One of the major areas of coordination is when USDA detects chemical contamination or excessive drug residues in animal products. In fact, FDA has a major initiative under way at this time to assist USDA in preventing sulfamethazine residues in pork. USDA has established a broader laboratory testing program for pork samples, and FDA is making resources available to investigate violations, to assure that this drug is properly utilized so as not to result in hazardous residues in the final product.

Sulfamethazine in Pork

QUESTION: In February 1988, the National Pork Producers Council asked its members to halt the use of sulfamethazine for 60 days pending the results of an FDA safety review. What has been the result of this study to date?

ANSWER: FDA initiated its safety review on January 26, 1988, when it sent letters to sponsors of sulfamethazine-containing products. The letters notified those sponsors of a recent mouse study that raised new concerns about the safety of sulfamethazine-containing products. The letters enclosed copies of the mouse study and requested sponsors to submit to the agency any additional data that would be relevant to the agency's review of sulfamethazine. On March 17, 1988, the Commissioner of Foods and Drugs met with drug sponsors to express his concerns about sulfamethazine-containing products and recent U.S. Department of Agriculture findings of violative residue levels of sulfamethazine in swine. The Commissioner indicated at the meeting that he would hold a legislative-type hearing in the near future to inform the agency of additional relevant scientific information relating to sulfamethazine use. The Commissioner noted that the agency would use such information to decide an appropriate course of action with respect to sulfamethazine-containing products. Such action could include a recommendation to the Secretary that imminent hazard proceedings be instituted, or the issuance of a notice of opportunity for hearing proposing to refuse approval of the NADA's for sulfamethazine-containing products. The legislative-type hearing will be held on May 25 and 26, 1988.

QUESTION: When does FDA plan to release its final report or make recommendations with respect to the continued use of sulfamethazine?

ANSWER: The agency anticipates that it will issue a final recommendation after the completion of the above mentioned legislative-type hearing. The agency expects that several months may be required to obtain all the relevant data from recent mouse and rat studies, and to fully analyze all the information presented at the hearing.

Antibiotics in Animal Feeds

QUESTION: Recent questions have also been raised with respect to whether the use of tetracycline in animal feed might lead to disease resistant strains with detrimental effects on humans. Is FDA doing work in this area? What is its status?

ANSWER: The National Academy of Science, NAS, is currently preparing a quantitative risk assessment for FDA on the human health consequences of subtherapeutic use of penicillin and the tetracyclines in animal feed. The panel involved in this process intends to review the scientific evidence to attempt to identify and quantify human risks. The original target date for the final report was April 30, 1988. NAS requested an extension of the contract term to July 31, 1988. The Project Advisory Group evaluated the request and concluded that an extension was reasonable in light of the complexity of the questions and the large volume of data to be reviewed. Accordingly, the requested extension was granted

QUESTION: Do you anticipate limitations on the use of antibiotics, such as tetracycline, in animal feed?

ANSWER: FDA intends to study the final report presented by the NAS panel before reaching a final resolution on the use of antibiotics in animal feed. The agency has been faced with this issue for a long time and believes that the information and risk assessment methodology is available to bring it to a conclusion.

QUESTION: What recommendations concerning antibiotics in animal feed will FDA be proposing?

ANSWER: Any recommendations concerning antibiotics in animal feed will be derived from FDA's study of the NAS report. If the NAS panel concludes that the existing scientific information is inadequate, their recommendations will be used in charting a future course of action.

Urethane Contamination in Alcoholic Beverages

QUESTION: On December 22, 1986, Newsweek Magazine reported that an FDA official (Ray Gill, Deputy Director of FDA's Center for Food Safety and Applied Nutrition) said the Agency planned to set limits on urethane, a carcinogenic contaminant found in alcoholic beverages, in 1987. A year later, FDA made voluntary agreements with liquor and wine producers setting targets for limiting urethane in future production. Do these agreements, in effect, mean that FDA won't take regulatory action against products that comply with the target levels?

ANSWER: Since the beginning of its investigation, FDA has been working closely with the alcoholic beverage industries and the Bureau of Alcohol, Tobacco and Firearms (BATF) to determine the reasons why ethyl carbamate occurs in alcoholic beverages, and what measures can be taken to eliminate or reduce its presence. Although the affected industries have been responsive in researching this problem, the Agency currently does not have necessary or complete information about the source of ethyl carbamate, the ability of the industries to eliminate or control the amount present, or an accurate assessment of the public health significance of this substance. For these reasons FDA has not established permissible levels for this substance in the various categories of alcoholic beverages. Rather, FDA has reached agreements with the wine and spirits industries under which they have initiated programs that include goals to reduce ethyl carbamate levels and timeframes when this reduction is to be accomplished. Unless new information is developed that would require a different regulatory approach, the Agency has no immediate plans to take regulatory action so long as these agreements are met.

QUESTION: Are these voluntary agreements legally enforceable? What will FDA do about beverages that don't comply with the target levels?

ANSWER: These agreements are voluntary and are not legally binding on FDA or the affected industries. However, FDA has no reason to believe that the wine and spirits industries will not make a good faith effort to maintain these agreements. The Agency has not determined what action would be appropriate for beverages that do not comply with the specified target levels.

QUESTION: How will the Agency protect consumers from high urethane contamination in liquors and wines that are already on the market or that enter the manufacturing, aging, or storage process before the effective date of the agreements?

ANSWER: FDA does not have any regulatory plan to take action against products already produced. The Agency believes that the toxicological data are inadequate to determine whether the levels of urethane in alcoholic beverages pose a significant incremental health risk over the time period in which they will be consumed. If information becomes available indicating that there is a significant incremental risk, FDA will reevaluate its current position.

QUESTION: Is it "fair" to consumers to allow sale of wines and liquors that are highly contaminated with a carcinogen, when safe alternatives are available?

ANSWER: It is FDA's view that the toxicological data presently available are not adequate to accurately assess the risk posed by the levels of ethyl carbamate observed in alcoholic beverages. Therefore the Agency is unable to address this question directly. We do know, however, that ethyl carbamate is an animal carcinogen, and we are therefore concerned about its presence and are working with the affected industries to reduce its presence to the lowest extent feasible in as short a time as feasible. FDA believes that this will be the effect of the agreements that the Agency has reached with industry.

QUESTION: Was FDA's reason for asking the National Toxicology Program to conduct new carcinogenicity studies of urethane a belief that the existing studies are inadequate for risk assessment?

ANSWER: Yes. FDA's assessment of the available data was that they were not adequate for the purpose of risk assessment. In view of the deficiencies in the data base, FDA asked NTP to carry out a bioassay that could be used for risk assessment.

QUESTION: How are the carcinogenicity data for urethane inferior to those FDA had available for aflatoxin, polychlorinated biphenyls, and nitrosamines at the time the agency first established action levels for those contaminants?

Answer: **Urethane is a well-established animal carcinogen that** has been extensively studied. The vast majority of the carcinogenicity studies on urethane, however, were not conducted under protocols that can be used for quantitative risk analysis for humans. Most of the urethane carcinogenicity studies have been by parenteral routes of administration (intravenous, intraperitoneal, subcutaneous, or by instillation). Few, if any, of these studies have involved lifetime administration of urethane. Hence, the studies that show urethane to be a carcinogen do not have the characteristics that we require for quantitative risk analysis. There are, however, four major studies that have been conducted that might suffice for quantitative risk analysis. These studies are the: 1) Innes, et al, study, "Bioassay of Pesticides and Industrial Chemicals for Tumorigenicity in Mice: A Preliminary Note," conducted by Litton Bionetics; 2) Tomatis, et al, study, "The Effect of Long-Term Exposure to DDT on CF-1 Mice," conducted by the International Agency for Research on Cancer, Lyons, France; 3) Toth and Boreisha study, "Tumorigenesis with Isonicotinic Acid Hydrazide and Urethane in the Syrian Golden Hamsters," conducted by The Eppley Institute for Research in Cancer, Omaha, Nebraska; and 4) Schmaehl study, "A Dose-Response Study on Urethane Carcinogensis in Rats and Mice," conducted at the University of Heidelberg in Germany. As is obvious from the titles, two of the studies were not primarily concerned with urethane, which was used only as a "positive" control. In terms of overall design and conduct, the Schmaehl study appears to be the best. The problem, however, with that study is two-fold. The slope of the dose-response curve is so shallow that it would make urethane totally different from all other known carcinogens, and, secondly, the organ specific tumor data are so weak that if we didn't know from the general body of scientific evidence that urethane was a carcinogen, we would not even find these data as presenting convincing evidence of the carcinogenicity of urethane. While the data and the risk assessments for aflatoxin, polychlorinated biphenyls, and nitrosamines are not perfect, nor for that matter is any risk assessment for carcinogens, they do not suffer from such crippling disabilities. There is a third concern that causes FDA scientists to be cautious in using the available data for risk assessment. As mentioned above, the Schmaehl study exhibits a dose-response slope that is so unusally shallow as to lack credibility in the absence of evidence that it is reproducible. Because of the shallow slope, the effect occurring at the lowest dose is of critical importance to assessing the degree of risk. Unfortunately, because this is true, a change in one or two tumors at this level can produce widely diverse risk estimates. Since the Schmaehl study produced quantitative results different from the other studies that are considered inferior in terms of overall design, FDA scientists are left with discrepant data from which widely different conclusions would be drawn.

Urethane, unlike most known carcinogens, has been studied in many different animal species - rats, mice, guinea pigs, hamsters and monkeys. It is clear that urethane's carcinogenic potency varies considerably from one species to another. For this reason, the Agency is concerned that even excellent animal data such as that which we expect to receive from the National Toxicology Program studies on rats and mice will not fully suffice for predicting human risk. In order to improve our capability to interpret and predict human risk from studies in rats and mice, plans are being drawn up to include an investigation of the adducts (chemical reaction products) of urethane with DNA among the studies that will be conducted. Information about the nature and the levels these reaction products in animals in which urethane is known to cause cancer can be used and compared to the nature and levels of such adducts in human tissue. By such means, FDA hopes to close the gap of uncertainty regarding the health significance of levels of urethane-contaminated wine and spirits.

QUESTION: How long after FDA first learned about urethane contamination (November 1985) did the agency determine that the existing studies are inadequate?

ANSWER: A final evaluation of the available carcinogenicity data for urethane was made in March, 1986. At that time it was determined that no modern lifetime bioassay existed for use in performing estimates of upper bound lifetime risk for cancer.

QUESTION: How long after FDA made that determination did the agency ask NTP to do the new studies?

ANSWER: The first request from FDA to NTP for a bioassay was made in February, 1987. The request was resubmitted to NTP as an FDA priority chemical for FY 1988 in September, 1987.

QUESTION: How long will NTP take to complete these studies?

ANSWER: FDA cannot provide an answer to this question since the time for commencing the study will depend on NTP policies, e.g. preparation and approval of a suitable protocol for the study and contract procedures. A conservative estimate for completion of the study and publication of a final report is 4 years after commencing of the study.

QUESTION: Why have delays in these determinations occurred?

ANSWER: There have been no unusual delays in the evaluation of data or in FDA making its request for testing of the compound in the NTP program. Evaluation of the data required that FDA obtain all pertinent toxicity data, including very detailed information from Professor Schmaehl and his colleagues in W. Germany regarding individual tumor data, to determine if this study would be suitable for risk assessment. The request to NTP for a new study followed the normal procedure for Agency submissions for the testing of an FDA priority compounds in the NTP program.

QUESTION: Can FDA now reliably estimate either the average urethane levels in alcoholic beverages or the percentage of existing beverages that would violate action levels that might be proposed? If so, could you please provide data on such estimates?

ANSWER: In order to reliably estimate the average urethane levels in alcoholic beverages, FDA would need to design a survey based on information that is not currently available. This information would include data on the total number of manufacturers and products, the variability among producers and among lots of a producer, and the volume share of each product. Thus far, bourbon is the only product type for which we have collected specific data from a representative survey. BATF conducted a special survey of the bourbon industry in which it collected one sample from each of 10 different lots of stock in barrels from 15 firms. The data collected were evaluated for the purpose of determining variance among lots and for predicting the potential for reducing urethane levels in bottled products. However, based on FDA's general review of all data from all sources, there appears to be considerable lot to lot variability in all beverage classes. FDA is also aware of data that show that even after production, urethane levels can be significantly affected in some products by elevated temperatures that may occur during shipping, storage, and handling, particularly in wines. Thus, the data demonstrate that there are a number of factors that must be considered when dealing with the urethane issue.

The range and the average and median levels of urethane for the limited number of samples from various classes of alcoholic beverages analyzed by BATF are shown in the attached table. Except for bourbon, the data upon which these estimates are based were generated in the absence of effective consideration of survey design specifications. Representative or probability sampling procedures were not employed. Therefore, there is no statistically valid way of knowing how much error is present in the data and hence how much confidence can be placed in estimates based on the data.

QUESTION: How many samples would FDA need to take to make such estimates?

ANSWER: BATF estimates that there may be as many as 400,000 differently labeled alcoholic beverage products in the US market place. Neither FDA nor BATF has the resources to conduct surveys of such magnitude. In order to reduce this number by designing a representative sampling protocol, proprietary product and market share information regarding the industry would have to be obtained. Even if this proprietary information were available, FDA anticipated that it would take several hundred samples per product type to obtain a representative sampling.

QUESTION: Why did FDA accept a wine industry plan that calls for a minimum of only 200 annual samples to estimate industry-wide urethane levels?

ANSWER: A minimum of 200 annual samples refers only to an initial lower estimate for the domestic wine industry's proposed survey prior to any detailed sampling design. The wine industry initially proposed market volume weighted composite samples to reduce the number of analyses needed to get an industry wide average. However, FDA is currently reviewing the industry's proposed protocol, which now envisions a minimum of 600 samples, to determine if additional information and protocol modification are required.

QUESTION: How much would it cost FDA to design and conduct such a urethane level analysis program for all alcoholic beverages sold in interstate commerce?

ANSWER: By interagency agreement, BATF is the agency that would normally monitor alcoholic beverages for urethane. BATF has estimated a cost of approximately $100-$300 per sample plus the cost of additional instrumentation. If a survey were conducted of all the differently labeled brands (up to 400,000) the cost would be prohibitively high. If, however, a more focused study were conducted based on proprietary information (e.g., market share) that is not currently available, the cost could be reduced significantly but would probably still approach a million dollars or more to get a representative picture of all types of alcoholic beverages.

QUESTION: Will FDA publicize the names of beverages that don't meet the targets stated in FDA's agreements with industry? How could FDA justify keeping secret the names of products that have more urethane than FDA and industry believe is appropriate?

ANSWER: The occurrence of ethyl carbamate in alcoholic beverages is an extremely complex issue both in terms of why it occurs and what is its health significance. The distilled spirits industry of the United States has obtained information on some processing changes that will reduce urethane levels to less than 125 ppb for new production. These modifications have been implemented in some distilleries and will be implemented in all distilleries by January 1, 1989. The wine industry has performed significant studies to determine the source of the urethane precursors and the pathways which the substance is formed. There is considerable evidence that one precursor is arginine, an amino acid naturally present in fruits, cereal grains, and many other foods. It appears that arginine is metabolized by yeast during fermentation to form urea, which reacts with alcohol to form urethane. Apparently, the quantity of this amino acid in the grape is influenced by the nutrients in the soil, climatic conditions, variety of grape, and vineyard practices. These and other factors are being investigated by the industry. In addition, the effects of processing steps on the formation of urethane in wine are being studied during the current production period. The wine industry has agreed that the 1995 harvest/crush should yield no more than 1 percent of table wine above 25 ppb and no more than 1 percent of dessert wines above 90 ppb. We plan to continue monitoring the progress being made by the affected industries in the attainment of their agreed upon goals and will base any action on the progress made by industry, as well as on the results of the National Toxicology Program's studies. Any testing done by either BATF or FDA will be released on request.

We have no plans to publicize the names of individual brands of beverages.

QUESTION: By what date do you anticipate that FDA will have in effect legally enforceable limits on urethane levels in alcoholic beverages?

ANSWER: As has previously been noted, we do not currently have the information on the avoidability of ethyl carbamate in foods or the public health significance of this substance in foods that is legally necessary for this agency to set tolerances. When such information is available, we will assess the need for tolerances. We can not predict when such information will become available. [The information follows:]

SUMMARY INFORMATION (1986 - 1987)
ALL ATF ETHYL CARBAMATE TESTING (Final as of 12/31/87)

TYPE	NUMBER OF SAMPLES	EC LEVEL IN PPB		
		RANGE	AVERAGE	MEDIAN
Blended Whiskey	15	0 to 168	46	31
Canadian Whiskey	13	13 to 54	32	35
Straight/Bourbon Whisky	118	0 to 1,719	180	130
Scotch Whisky	49	ND to 142	51	48
Other Whiskies	17	0 to 118	32	29
Domestic Gin	8	0 to 9	1	0
Imported Gin	2	0 to 2	1	n/a
Domestic Brandy:				
Grape	12	18 to 134	47	36
Fruit	8	46 to 387	204	193
Flavored	6	9 to 52	21	15
Imported Brandy:				
Grape/Cognac	51	ND to 185	39	25
Fruit	111	ND to 12,000	1,116	703
Domestic Rum (PR/VI)	18	0 to 35	13	11/12
Imported Rum	19	ND to 114	27	14
Vodka	25	ND to 0	0	0
Domestic Liqueurs	38	0 to 29	14	14/15
Imported Liqueurs	140	ND to 3,977	118	24/25
Tequila	12	0 to 46	15	14
Other Dist. Spirits	40	ND to 920	45.5	5
Domestic Wines:				
Table	67	ND to 102	10	0
Port	14	7 to 254	93	58
Sherry	10	18 to 209	82	83

Imported Wines:				
Table	**194**	**ND to 80**	**12.3**	**10**
Port/Madeira	**4**	**17 to 108**	**54.5**	**N/A**
Sherry	**5**	**23 to 82**	**62**	**71**
Sake and Rice Wine	**34**	**10 to 904**	**214**	**132**
Malt Beverages	**49**	**ND to 18**	**less than 1**	**0**
Misc. Wine Prod.	**31**	**ND to 715**	**74**	**12**
Bourbon (Stock)	150	10 to 903	174	116

Oil Labeling

QUESTION: With the alarming incidence of heart disease, many Americans are told to monitor their diets and limit their intake of various foods. Do you find that current practices for labeling vegetable oil are straightforward?

ANSWER: Yes, the practices FDA follows in regulating food labeling are sufficiently straightforward and are embodied in detailed regulation. These regulations are appliable to all foods, including vegetable oils.

QUESTION: According to these labeling practices, is it easy for consumers who are reducing or eliminating saturated fats in their diet, to know which vegetable oils contain saturated fats and which do not?

ANSWER: Nutritional information regarding the fat, fatty acids, and cholesterol content of food products is provided in the nutritional labeling part of the food label. However, nutritional labeling is voluntary. Where nutritional labeling is not provided by the manufacturer, it is difficult, if not impossible, for consumers to know which vegetable oils contain saturated fats, and how much saturated fat is in a particular vegetable oil.

QUESTION: Has FDA conducted or is FDA aware of any research that examines the different levels of saturated fats in various oils, such as palm, coconut, palm kernel, soybean, olive, safflower, corn, sunflower, rapeseed, and others. Would you please provide for the committee a percentage listing of the content of saturated fat contained in each of these oils?

ANSWER: Many government agencies, including FDA and USDA, food manufacturers, university laboratories, and trade associations are conducting research to determine nutritional composition of various vegetable oils. FDA currently has such a project underway. Data generated from these efforts are reported in many scientific journals, such as the Journal of the American Oil Chemists' Society, the Journal of the Association of Official Analytical Chemists, and the Journal of Agricultural and Food Chemistry.

Data on nutritive value, including the saturated fatty acid content of vegetable oils, were complied in the USDA Agriculture Handbook

No. 8-4 entitled "Composition of Foods: Fats and Oils, raw, processed and prepared" (1979). Much of the data presently in the USDA nutrient data bank are identical to those included in the attached table. The tabulated data include saturated, monosaturated, and polyunsaturated fatty acid information. From a nutritional biochemistry prospective, one can not conduct dietary manipulations involving fats intelligently without considering all categories of fat and their influence on serum triglycerides and cholesterol levels.

[The Information follows:]

Fatty Acid Cmposition (g/100g fat) of Selected Vegetable Oils

Oil	Saturated	Monosaturated	Polyunsaturated
Coconut	86.3	6.1	1.8
Plam Kernel	81.4	11.4	1.5
Palm	47.8	38.4	8.8
Olive	14.2	72.5	8.9
Cottonseed	26.1	19.9	50.7
Peanut	17.3	46.9	31.0
Soybean	15.1	23.1	57.6
Rapeseed			
zero erucic acid	5.9	54.9	33.2
low erucic acid	5.4	60.3	27.0
medium erucic acid	4.7	64.5	22.3
high erucic acid	4.2	67.0	21.4
Safflower			
regular	9.5	12.5	73.8
high oleic acid	6.4	76.9	12.3
Sunflower			
Northern	10.3	21.3	65.7
Southern	10.9	34.2	48.7
Corn	12.7	24.7	59.1

Source: Data adapted from Tables III and IV, Sheppard, Iverson and WEihrauch, Chapter 7, Handbook of Lipid Research, Vol. 1A, A Kuksis, Editor, Plenum Pub. Corp., New York, 1978.

Note: Minor fatty acids of less than 0.1g are not included.

QUESTION: Can saturated fat intake be associated generally with cholesterol levels?

ANSWER: Yes, saturated fat intake can be associated generally with plasma cholesterol levels. Plasma cholesterol levels are influenced by a number of factors, including the amount of fat, type of fat, and amount of cholesterol in the diet. Controlled clinical studies carried out over the past few decades to investigate the influence of these dietary factors on the plasma cholesterol levels have shown that those levels tended to be higher with the ingestion of diets containing relatively high amounts of saturated fats and lower with the ingestion of similar diets containing less saturated and more polyunsaturated fats.

QUESTION: Might consumers with a history of heart disease be placed on diets to reduce their cholesterol levels?

ANSWER: Yes, consumers with a history of heart disease could be placed on diets to reduce their cholesterol levels. A large body of epidemiological evidence supports a direct relationship between the level of total plasma cholesterol and the rate of coronary heart disease (CHD). Such evidence includes comparison studies involving people who have migrated to another country, that indicated that the risk of developing CHD increased as the plasma cholesterol level increased throughout the range of cholesterol levels. Prospective studies of individuals within a population uniformly show that plasma cholesterol levels predict the future occurrence of CHD. Randomized clinical trials, such as the Coronary Primary Prevention Trial, have demonstrated that the incidence of CHD was significantly reduced by reducing the levels of plasma cholesterol. Furthermore, these studies also showed that lowering the plasma cholesterol levels was effective in preventing recurrent myocardial infarction and death in patients who have had a heart attack. The usual dietary habits of Americans have been identified as probable significant contributors to elevated plasma cholesterol. These dietary habits include excessive intakes of saturated fat, cholesterol, and calories. Modification of the diet to lower the intakes of saturated fat, cholesterol and calories has been shown to be an effective means of decreasing the level of plasma cholesterol in most individuals. Since lowering plasma cholesterol levels reduces the risk of CHD or the recurrence of myocardial infarction, diets to reduce plasma cholesterol levels are highly recommended for consumers with a history of heart disease.

QUESTION: Would their intake of saturated fats be restricted?

ANSWER: Yes, the intake of saturated fats should be restricted in consumers with a history of heart disease. Among the factors that influence the level of plasma cholesterol is the fat content of the diet. Studies have shown that the relatively high intake of saturated fat (estimated to be about 13-15% of total calories) is a significant contributor to elevated plasma cholesterol levels. Among other means, decreasing the saturated fat intake was shown to be effective in lowering the plasma cholesterol level. This finding suggests that a restriction of the saturated fat intake by an individual with a history of heart disease is highly desirable. The current dietary recommendations by the National Cholesterol Education Program Committee, sponsored by the National Heart, Lung and Blood Institute, for lowering plasma cholesterol are that the total fat intake should be less that 30 percent of the total calories, that saturated fat should be less that 10 percent of the total calories, and that polysunsaturated fat should be up to 10 percent of the total calories.

QUESTION: Wouldn't it be fair to these consumers to present complete, accurate information about the fat content of vegetable shortening or oils they may be consuming?

ANSWER: Yes. The FDA has long held that truthful and accurate information about dietary fats is important to consumers. The agency has regulations that require declaration of the fatty acid content of foods when claims about fatty acid content are made.

QUESTION: What does FDA intend to do about this situation?

ANSWER: FDA, with the advice of other Public Health Service agencies, such as the National Heart, Blood and Lung Institute, has been assessing consumers' need for more information about the fat content of foods. On November 25, 1986, the Agency proposed to broaden requirements for fatty acid labeling (saturated and polyunsaturated fats) when cholesterol claims are made for a product. The proposal would force manufacturers to declare the fatty acid content of their products when they make claims that their products are low in, or free of cholesterol. The Agency is currently planning to propose changes in the label declaration of the fatty acid content of foods to reflect new advances in scientific knowledge about the effects of monounsaturates and of other categories of fatty acids. In addition, FDA has been encouraging manufacturers and retailers to provide more information about the fat content of food products. FDA has provided guidelines to industry on the definition of terms used in fat labeling, and the Agency has been a partner in studies designed to provide consumers with point-of-sale information, including studies with the Giant Food and Stop and Shop supermarket chains.

Food Labeling

QUESTION: Commissioner Young, do you believe that food labeling is an effective tool for informing consumers of nutritional content and dietary precautions of the foods that they consume?

ANSWER: Nutrition labeling is now widely available in the U.S. packaged food supply. Nutrition information appears in 52 out of 56 food groups in grocery stores, on brands accounting for 59 percent of sales in total.

FDA consumer surveys as well as other public opinion polls reflect substantial use of both the nutrition label and package ingredients list by shoppers for purposes of food selection. Two-thirds of shoppers in a 1978 FDA-survey said they pay attention to the nutrition label, while 54 percent said they use the ingredients list to avoid certain constituents. As a specific example, avoidance of salt/sodium through use of label information rose from a reported 14 percent of shoppers in 1978 to 44 percent in 1986. According to a 1984 Roper survey, the food label is the most widely used source of information about nutrition content, mentioned by 57 percent of the public. In addition, 37 percent of the public considered food labels the single most useful source of nutrition information.

Increasingly, health care professionals are recommending that patients on medically directed diets look at the food label. This advice is being followed by the public, as reflected in an increase from 5 percent in 1982 to 29 percent in 1986 of FDA survey respondents on sodium-modified diets who have been advised to examine the nutrition list and/or ingredients list when making food purchases.

QUESTION: Do you believe that the American public is learning to rely on food labeling in selecting their groceries?

ANSWER: In addition to its wide availability on packaged foods and claimed use by a substantial segment of the American public the food label is accorded a high level of credibility relative to other nutrition information sources. Furthermore, there is growing evidence that actual food store purchases are influenced by nutrition labeling.

In a 1982 opinion survey sponsored by the U.S. Department of Agriculture, the food label was among the five highest rated sources of nutrition information, ranking together with various health care professions, government publications and textbooks, and ahead of eight other listed sources. In three marketplace studies conducted jointly by FDA and retail grocery chains between 1981 and 1986, actual food purchases in grocery stores were observed to shift toward brands bearing individualized shelf labeling which called attention to reductions in fat, cholesterol, calories or sodium, and away from competing brands having none or fewer of these special characteristics. Purchase patterns were seen to change across a wide range of product categories. Labeling descriptor terms used were consistent with definitions in existing as well as pending nutrition labeling regulations. These marketing experiments were undertaken with the objective of exploring new ways to augment and complement the existing nutrition label. Taken as a whole, the research evidence demonstrates that not only consumers, but food manufacturers, and retailers as well are placing greater emphasis on the nutritional characteristics of foods and that the nutrition label is an important catalyst in these changes.

QUESTION: With over 46 million people a day eating in fast food restaurants, do you believe there would be any benefit to requiring ingredient labels on fast foods?

ANSWER: While there may be some benefits to requiring such labeling, the Agency believes there would be significant problems in making such a regulation practicable and equitable. One major concern would be in defining what constitutes a fast food

restaurant, in view of the many different types of food service establishments. Other issues would include the cost impact on the segment of the industry affected, and the Agency's costs in enforcing such a regulation. The Agency's response to the Center for Science in the Public Interest's petition on this issue, which spells out our rationale for not requiring ingredient lists on fast food, is attached for the record.
[The information follows:]

LETTER FROM JOHN M. TAYLOR, ACTING ASSOCIATE COMMISSIONER FOR REGULATORY AFFAIRS

SEP 5 1986

Michael F. Jacobson, Ph.D.
Executive Director
Center for Science in the Public Interest
1501 Sixteenth Street, N.W.
Washington, D.C. 20036

Dear Dr. Jacobson:

The agency has evaluated your citizen petition (Docket No. 85P-0307/CP) and its addendum, dated June 24 and November 14, 1985, respectively, in which you requested that the Food and Drug Administration (FDA) issue a statement of enforcement policy that would require the label disclosure of ingredients of foods served in packaged form in "fast food restaurants." The agency has also evaluated the comments submitted to FDA in response to the filing of your petition.

The agency has delayed action on this matter because we expected to receive cost/benefit analysis data from you in support of your petition. As we stated at our meeting with you on this subject on August 14, 1985, your petition does not contain any cost/benefit information, nor does the agency have any information on the projected cost of implementing the suggested enforcement policy. The agency would need this information to determine whether the potential benefits of the action you seek outweigh the potential costs, and whether such an enforcement policy would be an efficient and effective allocation of the agency's limited resources.

Also, we find that you have not adequately addressed several important questions that are raised by the contention that you make in your petition. As a result, we are unable to reach a decision on the merits of the requested action. Because you have failed to support your petition adequately, the agency is denying your petition without prejudice to a future filing. In any future submission regarding "fast food" ingredient labeling, you will need to address the issues discussed below.

Your petition defines a "fast food restaurant" as "any outlet of a restaurant chain with more than 10 franchises that serves food in packaged form that satisfies the...definition of a 'label'" under section 201(k) of the Federal Food, Drug, and Cosmetic Act (the act) (21 U.S.C. 321(k)). However, it is not clear to us exactly what type of restaurants your petition is intended to include. Your definition, on its face, would include far more than the chain restaurants that are commonly perceived as "fast food restaurants." It could be construed to include franchised entertainment and leisure establishments that happen to provide food services but that are clearly not perceived as "fast food restaurants" and that are not frequented by consumers in search of a complete meal. This category of establishments would include ice cream parlors, doughnut shops, movie theaters, bowling alleys, and amusement parks. Consequently, should you decide to review your petition, it will be necessary for you to clarify the intended coverage of any proposed policy. Keep in mind that FDA has limited resources, and that the broader the scope of coverage, the more difficult the policy would be to enforce.

Your petition fails to explain why only franchised restaurants, as opposed to wholly-owned chain restaurants, would be subject to the labeling requirements. In addition, you have provided no reason or justification why FDA should apply the suggested enforcement policy based upon company structure (franchised operation) or company size (more than 10 outlets). The relationship between these factors and the question of when labeling is appropriate is not clear. Finally, you have provided no explanation as to why you selected 10 franchises as the cut-off point for requiring compliance with this policy.

Moreover, you have not provided a good explanation why FDA should distinguish between so-called "fast food restaurants," as defined by your petition, and all other food service establishments. Your petition describes "fast food restaurants" as being akin to small, decentralized food manufacturing facilities whose limited variety of products are highly standardized and usually served in wrappers that could easily accomodate ingredient information. However, "fast food restaurants" are not the only food service providers that offer a limited variety of foods, without frequent changes in the menu or the recipes used in food preparation, and that serve food in wrappers. Many independent nonfranchised food service establishments (e.g., delicatessens) serve ready-to-eat foods in this manner. Furthermore, not all franchised food service establishments serve standardized food products. Since many franchised food service outlets are independently owned and operated, certain components of food products may be obtained locally or regionally. For example, rolls, buns, or croissants made with differing ingredients may be purchased at different local bakeries to make hamburgers or sandwiches that are, by all appearances, the same at all franchised outlets.

Your petition claims that "fast food restaurants" should be required to disclose ingredient information about the foods they serve because such foods constitute a significant portion of the diets of millions of Americans. However, you do not provide sufficient data from which to determine what percentage of meals are eaten in "fast food restaurants," as defined by your petition.

You claim in your petition that ingredient labeling of "fast foods" is warranted for compelling health reasons. In support of your argument, you state that sixty-six million adults believe that they have suffered adverse reactions to foods. The agency questions whether this figure simply represents survey findings about people who believe that they have ever had any type of adverse reaction to foods. Also, you have not provided any data on how this figure relates to actual allergic-type adverse reactions to foods. Nor have you provided any information on what portion of those reactions could have been avoided if ingredient labeling information had been provided in "fast food restaurants" as requested in your petition. Furthermore, you have not shown that the rate of adverse reactions to foods served in "fast food restaurants" having more than 10 franchises was substantially higher than in other public eating places.

Although FDA acknowledges that its policy has been to require a declaration of ingredients where a food product is labeled, the agency has significant reservations as to whether it would be practicable or equitable at this time to enforce such a requirement against one segment of the food service industry as you suggest in your petition. The impracticability of such a requirement can best be illustrated by way of example. Consider the cost, the inventory control and storage problems, and the inherent confusion of maintaining a separately labeled supply of beverage containers of various serving sizes. A beverage cup used to serve a fruit flavored drink would bear an ingredient declaration different from the ingredient declaration on the same size cup used to serve a cola beverage, an iced tea, or a milkshake. Thus, a "fast food restaurant" that serves six different beverages in three different serving sizes would have to maintain an inventory of eighteen separately labeled cups. Increased operating costs that might be passed on to the consumer may result from additional printing expenses, greater inventory control and storage expenses, and costs associated with reduced efficiency and convenience of service. Another example of the foreseeable problems associated with the policy you advocate would be the unmanageable number of separately labeled boxes required to serve different sizes of pizza prepared with various combinations of toppings.

The agency finds no rational or equitable basis for imposing the cost of ingredient labeling for packaged restaurant foods against only those food service establishments that have more than ten franchised outlets, while excluding all other food service establishments. To the extent that this cost would be passed along to the consumer, there would be a disparity between consumer prices for similar food products served by these different segments of the same industry. Thus, those food service establishments not providing ingredient labeling and not subject to enforcement of ingredient labeling requirements could derive a distinct market advantage.

Your petition asserts that consumers have a basic right to know the ingredients in restaurant foods. The agency agrees that ingredient information may be useful to consumers who are interested in making value comparisons and informed choices between food products. However, FDA cannot realistically enforce an ingredient labeling requirement for restaurant foods because the agency does not have sufficient resources and staff. Also, FDA is not aware of any evidence that demonstrates that the situation in "fast food restaurants" that serve food in containers or wrappers is so unique that a special labeling requirement is necessary for these establishments. To justify such a requirement, we would expect to see evidence that consumers are more likely to be confused about the composition of foods when eating at this type of restaurant than when eating elsewhere. Your petition does not contain any evidence to this effect.

Your petition maintains that the container or wrapper in which a "fast food" is served is a label within the meaning of section 201(k) of the act (21 U.S.C. 321 (k)), and that such food is misbranded unless its label bears ingredient information in accordance with section 403(i) of the act (21 U.S.C. 343(i)). The agency acknowledges that many containers and wrappers currently being used to serve "fast foods" can be construed to be labels as defined by the act. (Section 201(k) of the act defines the term "label" as a display of written, printed, or graphic matter upon the immediate container of any article.) However, any ingredient labeling requirement based on section 403(i) of the act could be easily circumvented by the use of packaging that displays no written, printed, or graphic matter because such generic packaging materials would not be labels under section 201(k) of the act. Also, the use of generic wrapping materials is already quite common in the food service industry.

As stated earlier, the agency has no information on the projected cost of implementing the suggested enforcement policy. However, given the number of food service establishments, the number of menu items, and the variety of combinations that exist for each menu item, FDA expects that there would be substantial expenditures on the part of both the food service establishments and the government agency responsible for regulating them if all food service establishments were required to provide ingredient labeling on "fast food" packages. Nonetheless, FDA supports voluntary efforts by the food service industry to provide consumers with ingredient information.

Because the agency has the equivalent of only 350 inspectors in the entire U.S. to regulate foods, it has traditionally regarded regulation of the food service industry as the responsibility of state and local governments and has limited the Federal role to providing guidance to these state and local regulatory authorities. For the reasons presented above, the petition that you submitted has not demonstrated that a change from our traditional policy for "fast food restaurants" is appropriate.

The agency understands that you are currently developing additional cost data and conducting public surveys. Therefore, this denial is without prejudice to the filing of future petitions accompanied by sufficient supporting material on the subject. Should you decide to repetition the agency to adopt "fast food" labeling requirements, it will be necessary for you to address the issues raised in this response.

Sincerely yours,

John m Taylor

John M. Taylor
Acting Associate Commissioner
for Regulatory Affairs

cc:
HFC-1 #3072
HFC-200
GCF-1(Horton)
HFW-10
HFF-305
HFA-224
HFF-300
HFF-310
HFF-312(Smith)
HFF-312 r/f
HFC-230
HFC-101

QUESTION: With respect to the claim that a food is "lite", has FDA been involved to see that such a claim is uniformly based on nutritional value of the food in question?

ANSWER: Yes, in the course of reviewing label claims on a case by case basis, FDA evaluates the appropriateness of "light" and "lite" claims.

The term lite has not been defined by the FDA but, based on our reviews, we find that the term is not used uniformly to convey the same meaning. Unqualified, it suggests that the product is useful in weight reduction or control. Accompanied by sufficient explanatory statements, however, the term may be legitimately used to indicate other attributes of the food, such as lower sodium content or lighter texture.

We will continue to review such claims and, whenever necessary, inform firms of our opinion on the appropriateness of the term.

QUESTION: With respect to specific health claims, is FDA assuring that these claims correspond to disease prevention or care?

ANSWER: Yes, in the near future, FDA will be publishing in the Federal Register its view as to how health related information concerning the relationship between a healthy diet and the incidence of disease may be presented on product labeling.

Food Safety - Olestra

QUESTION: Commissioner Young, it is my understanding that there are other fat substitutes that may soon be introduced into the marketplace, such as Olestra, that could replace fats traditionally used in dairy foods and in salad and cooking oils. Do you believe that these fat substitutes are as safe as dependable as natural substances?

ANSWER: Currently, FDA is reviewing the petition for Olestra as well as pre-petition information for other fat substitutes. Until its review process has been completed the Agency cannot comment on the safety of any of these substances or to compare their safety to that of natural fats and oils.

QUESTION: Do you believe that the tests and analysis conducted on such products confirm any worries that consumers might have with respect to future and continued use?

ANSWER: As noted above, the Agency is evaluating the information that it has received and a conclusion cannot be rendered until this evaluation is completed. The Agency will use the safety standard for food additives to evaluate these products; i.e., whether there is a reasonable certainty that no harm will result from the petitioned use.

QUESTION: Have sufficient studies of Olestra been conducted? What is the duration of these studies and in how many trials involving how many laboratory animals or human subjects?

ANSWER: Again, Olestra and the other products are under review, and the Agency has not determined the adequacy of the safety studies. The current petition lists 114 studies, including studies with both animal and human subjects. The duration of the animal studies range from 28 days to 44 months. The duration of the human studies range from 1 to 134 days.

QUESTION: Has any analysis of the impact that synthetic fats would have on traditional agricultural markets been completed?

ANSWER: The statutory criteria for permitting use of a food additive do not include considerations of economic impact on competing markets. The statute provides that the Agency look only at whether the proposed use of the additive will be safe in deciding whether to permit that use. Accordingly, neither FDA nor any petitioner has undertaken an analysis of the impact of synthetic fats on traditional agricultural markets.

QUESTION: Will synthetic fat substitutes require special labeling to assure consumers of their safety for specific uses or by individuals with specific dietary restrictions?

ANSWER: If and when any fat substitutes are approved, a decision will be made as to whether special labeling is required for the safe use of these food ingredients. If FDA determines that labeling is required, the Agency will require it.

QUESTION: What fat substitute has been approved for marketing in the past five years? What applications are currently pending? Do you plan to take final action on these in the near future? If so, when?

ANSWER: No fat substitute has been approved by FDA in the past five years. The food additive petition for Olestra is currently the only petition pending. The Agency does not know when final action on the petition will occur.

Sulfites

QUESTION: Commissioner Young, in the budget justifications provided to the Committee, you noted that the closing of the comment period on your regulations on sulfites used on fresh potatoes in restaurants was March 7, 1988. When will the final regulations be made available?

ANSWER: The Agency's present timetable calls for a final regulation to be published no later than December, 1988.

QUESTION: Does FDA plan to expand the regulations to include frozen, canned, and dehydrated potatoes served in restaurants?

ANSWER: The Agency requested comments on this issue, and is considering those that were received. FDA will address this issue in the final rule.

QUESTION: Is it true that FDA has acknowledged that when potatoes are served unpackaged and unlabeled to consumers in restaurants that sulfite use can occur without proper safeguard?

ANSWER: Yes, this situation, in part, is what caused FDA to propose restricting the use of sulfites on "fresh" potatoes.

QUESTION: If your final regulations ban sulfite use on fresh potatoes served in restaurants, would consumers be able to distinguish whether potatoes they are served do or do not contain sulfites?

ANSWER: If the final regulations ban sulfite use on fresh potatoes served in restaurants, the consumer still would not be able to discern whether potatoes they are served do or do not contain sulfites. However, FDA believes that because of the action it has taken to require the labeling of the use of sulfites in packaged foods, sensitive individuals will be aware of the types of potato products that contain sulfites and will know not to order those types of products in restaurants.

QUESTION: Are there adequate substitutes in lieu of sulfite use on potatoes?

ANSWER: FDA is aware of substitutes for sulfites. However, the industry has not enthusiastically embraced any of these substitutes, so their adequacy is open to question.

QUESTION: What is FDA doing to encourage growers and processors to use substitutes for sulfites?

ANSWER: FDA has made known its concerns related to the health risks associated with the use of sulfites, through the issuance of regulations and other actions. In so doing, FDA has encouraged the industry to reduce their use of sulfites and to do research to find suitable alternatives.

QUESTION: Another note in the budget states that proposed regulations on sulfite use in all other foods are expected to be published in Spring, 1988. Are you still operating under this timetable?

ANSWER: Our current timetable calls for a proposed rule to publish in October 1988.

QUESTION: Where are the regulations in the process now?

ANSWER: As of this date a document has been developed and is under final agency review.

QUESTION: Do you believe that labeling is sufficient to protect sensitive consumers?

ANSWER: FDA has not limited itself to requiring labeling of sulfite containing foods. FDA has banned the use of sulfites on fresh fruits and vegetables and, as discussed previously, proposed to ban their use on "fresh" potatoes. Thus, FDA has acted with respect to the uses of sulfites that are associated with the highest number of allergic type reaction. In conjunction with these actions, labeling will go a long way in enabling the consumer to avoid excessive exposure to sulfites. However, it is incumbent upon the consumer to read the labels and, when eating out, to inquire if sulfites are used in different preparations. Taken as a whole we believe that FDA's program with respect to sulfite will adequately protect sentive consumers.

QUESTION: Would restrictions on the use of sulfites provide better safeguards to the consumer?

ANSWER: As I have explained, FDA has restricted some uses of sulfites and is considering whether restrictions on the use of sulfites on potato products are necessary. It seems unlikely that other restrictions on the use of sulfites will be necessary. Most people are not sensitive to these ingredients. Therefore, labeling and specific limitations on the uses of sulfites seem likely to provide adequate protection to consumers.

Milk Safety Training

QUESTION: In your budget justifications, you note that FDA has increased the level of training for milk safety by 25 percent in 1988. What level of funding has been set aside to conduct milk safety training in 1989? How does this compare to 1988?

ANSWER: The Agency currently plans on spending about $170,000 to conduct milk safety training in FY 1989. This is the same funding level as was in 1988 with an adjustment for inflation.

QUESTION: Do you plan to continue efforts at this level in 1989?

ANSWER: Yes, FDA plans on training the same number of personnel in FY 1989 as it did in FY 1988.

QUESTION: How many individuals have received training under FDA's auspices?

ANSWER: A total of 390 persons were trained in FY 1987 and the Agency plans to train 505 persons in FY 1988.

Imported Foods

QUESTION: In the fiscal year 1989 budget, FDA proposes to increase the number of samples of imported product samples examined by about 900. At the same time, additional wharf examinations and sample collections would be increased by 4,350. For what reasons does FDA find it necessary to increase inspections of imported foods? On what assumptions are these figures based?

ANSWER: Included in the FY 1989 budget request is an increase of 28 FTE's that will be used to strengthen our imported products surveillance efforts. The resources allocated to coverage of imported products has not kept pace with the increase in imported products entering this country. In 1973, FDA devoted about 355 FTE's to the coverage of some 500,000 formal entries of imported foods, drugs, and other regulated products. In FY 1988, resources for coverage of imports increased to about 540 FTE's, a 52 percent increase, while formal entries of imported products have increased to an estimated 1.6 million, a 220 percent increase. Even with technological and productivity improvements in this program over these years, the Agency is concerned that the resources currently devoted are not sufficient to keep up with this increasing workload. Therefore, additional resources are being requested in the 1989 budget.

QUESTION: Are chemical and pesticide residues a major problem with respect to imported food products?

ANSWER: In the past 3 fiscal years, FY 85-87, over 95 percent of the imports analyzed complied with U.S. pesticide regulations (based on more than 18,000 samples). The small percentage in which actionable residues were found usually involved situations in which there was no tolerance for the particular pesticide in the commodity although there were tolerances for the pesticide on other commodities, often at higher levels than those found on the actionable sample. The commodities in which violative residues were found generally were ones that constitute only a small proportion of the diet (e.g., spices, exotic fruits). The following table summarizes FDA's monitoring findings for FY 85-87.

FDA Monitoring for Pesticides and Industrial Chemicals in Foods FY 1985 - 1987 1/

	Domestic	Mexican Produce	Other Imports
FY 85	8,550 (1.4%)	3,001 (3.2%)	2,469 (5.4%) 2/
FY 86	6,207 (2.3%)	2,863 (1.8%)	2,561 (7.0%) 3/
FY 87	5,793 (1.5%)	3,444 (3.7%)	3,953 (4.8%)

1/ Number of samples analyzed followed by per cent of samples actionable. Data for domestic and Mexican produce monitoring pertain to samples collected on a surveillance basis (samples collected with no prior suspicion that illegal residues may be present in that food sample/shipment). Data for other imports do not distinguish between surveillance and compliance samples.

2/ Of the 134 actionable "other import" samples, 65 were mangoes with illegal residues of EDB.

3/ Of the 178 actionable "other import" samples, 60 were hops and 67 were grapes.

QUESTION: Are microbiological pathogens a serious problem?

ANSWER: Microbial pathogens are of increasing concern in imported foods. Because of the expansion of world markets, we are experiencing a flood of new foods at import docks. There has been a particularly dramatic increase in ready to eat foods and partially prepared foods. This increase in new foods has been coupled with a world-wide increase in foodborne disease.

Products are now coming from countries that have not previously exported foods to the United States. Some of these exporting countries have poor food sanitation practices, as demonstrated by the presence of pathogens in their products. FDA must increase coverage of these imports to prevent further increases in foodborne disease and to exclude microbial problems not now endemic in the United States.

QUESTION: Is lead a problem in ceramic products?

ANSWER: Exposure to lead, a toxic element, is known to be dangerous and even fatal. Lead accumulates in the bones and soft tissue. High levels of lead in the body can harm the nervous, cardiovascular, immunologic, reproductive, and gastrointestinal systems, as well as blood production, the liver, and kidneys. Of particular concern is the ingestion of lead by children because they can absorb lead more easily than adults. Evidence indicates that even at low levels, lead may cause learning and behavioral disorders in children.

Lead is a common component of glazes, particularly those glazes that provide a shiny, high-lustrous finish, and decals used to decorate ceramicware. Generally, ceramicware is safe if it is coated with glazes that are properly formulated and applied and then fired at a high temperature for an adequate length of time. However, if such precautions are not taken, lead in the glaze may leach into food stored in the ceramic item. In ceramicware that is improperly manufactured, acidic products, such as orange juice, may exacerbate the problem, because such products can accelerate the release of lead from the glaze. The length of time the food is stored in the container is also a contributing factor to high levels of lead leaching into the food. Consumers are at a disadvantage because a properly manufactured ceramic item may be indistinguishable from an improperly manufactured item unless a chemical assay is performed.

A separate, but related, concern is the small quantities of foreign-made ceramicware brought into the country by tourists and Americans such as military personnel who have been temporarily assigned to foreign posts. These ceramic products may pose a greater threat to individuals using them for food storage than commercial shipments because they may be manufactured by producers with little or no knowledge of the danger posed by improperly produced ceramicware. We are attempting to alert consumers to the hazards associated with excessive levels of lead in ceramicware through a variety of means, including publications such as "Know Before You Go," published by the U.S. Customs Service to provide information to American tourists traveling to foreign countries.

The dangers of lead in ceramicware are particularly high in those items manufactured before the early 1970's. It was not until that time that the hazards from lead became generally recognized by industry, government, and consumers throughout the world. FDA has been constantly reminding consumers of this fact, suggesting that they avoid the use of older dinnerware for food use, unless they are sure of its safety.

QUESTION: Are surveillance tests conducted at the port of entry or at FDA laboratories in the field?

ANSWER: Imported products may be examined at either the port of entry or in the laboratory, depending upon the type of examination performed. For example, analysis of a food product for microbiological contamination will be performed in the laboratory while coffee beans can be visually examined on the wharf for filth/insect contamination.

QUESTION: Would you please provide the subcommittee with a record of the incidence of these problems vis a vis inspections that have been conducted in 1987 and in 1988 to date? (Please use a chart format).

ANSWER: The information follows:

FISCAL YEAR	NUMBER IMPORT SAMPLES 1/	
	ANALYZED	ADVERSE FINDINGS
1987	30,753	11,627
1988 2/	16,394	6,134

1/ All samples analyzed, foods, drugs, devices, etc..
2/ 6 months accomplishments.

QUESTION: If the Pesticide Monitoring Improvement Act H.R. 3504, were enacted into law, what additional funding and FTE's would FDA require? Please specify for what purposes.

ANSWER: Current staff estimates are as follows:

Activity	FTE	$000
Data reporting requirements from existing and planned Import Support and Information System data	5	300
Development, implementation, and use of data from 30 new international cooperative agreements	20	1,200
Increased analytical methods research	20	3,000
Data base for increased foreign data analysis and risk analysis	10	4,500
Comprehensive evaluations of monitoring data	7	200
	62	9,200

It should be noted that these are preliminary staff estimates. If this or a similar Bill is passed, the Agency will have to review these estimates again. It should also be noted that the agency has not identified offsets which would be required to accomodate program increases over the President's budget request and still remain within the ceilings of the Bi Partisan Budget Agreement.

QUESTION: Has FDA completed the development of a data base for tracking residues and contaminants? Do you have sufficient staff to provide summarizations of the incidence of surveillance problems and relevant details such as thy type of products, country of origin, rate of occurrence, etc? If more staff might be needed, how many FTE's would be assigned to such work?

ANSWER: Since the early 1970's, FDA has maintained a computerized reporting system for sample analysis data from its pesticide monitoring program. For each sample analyzed, the field office enters such information as the product name, sample number, sample collection date, state or country of origin, analytical methods used, and residues found. Because the monitoring program generates a huge amount of data, FDA has been working to develop computerized summaries of the data. Although the computerized summaries present the data in a somewhat more concise manner, evaluation of the data is extremely labor-intensive due to the complexity of the subject area involved. Comprehensive evaluation of FDA monitoring data would require the allocation of seven additional FTEs as outlined in the previous question.

QUESTION: How do importers currently certify what residues may be present in imports to the U.S.?

ANSWER: At this time, there is no specific law or regulation that requires importers to certify what pesticide chemicals are being used on produce shipped to the U.S. Consequently, importer certification of possible residues is rarely encountered.

Exceptions arise in automatic detention and formal certification programs. When FDA subjects a product to automatic detention for illegal pesticide residues, based on analytical results or other reliable information, the importer must provide proof that each shipment is free of such residues. Such a showing is usually made by submission of a report of an analysis from a private laboratory at the importers′ expense.

The second way to provide certification of either non-use of a particular pesticide or identification of what is used on a particular crop is by a formal certification program between FDA and another responsible group (e.g., a government or a trade organization). Both domestic importers and foreign shippers may be involved in the development of a certification program. This procedure is currently being used for the Chilean grapes treated with sulfites, a fungicide. The Chilean exporters′ association monitors sulfite usage and certifies to FDA that residues will not exceed allowable limits. With both private laboratory certification and formal certification programs, FDA conducts audit sampling to check on the reliability of the private lab results or the certification program.

QUESTION: If an imported product is "reconditioned" to bring it into compliance with U.S. standards, because it does not achieve initial import standards, does FDA monitor this process? What is the average number of work hours associated with such monitoring each year?

ANSWER: Most products that have been found to contain illegal pesticide residues are not capable of being reconditioned. With few exceptions, pesticides cannot be removed from products and as a result reconditioning is neither proposed or approved. Exceptions have included reconditioning processes involving endrin in mung beans, folpet in hops, and EDB in mangoes. In each situation, the importer was required to submit a reconditioning plan that included follow-up testing or certification to assure that the reconditioning procedure brought the article into compliance.

At the present time, there is no national data system for capturing and recording the amount of time a district spends supervising reconditioning activities. This supervision of reconditioning efforts may include travel to locations far removed from FDA offices and complete establishment inspections as well as sampling and analysis of the reconditioned product and supervision of the destruction of rejected products. The time that is actually spent on the supervision of a reconditioning and the laboratory time spent in analysis are chargeable to the importer. Since there are very few products that contain pesticide residues that can be reconditioned, the average number of hours per year spent on this type of reconditioning is probably very small.

Proposition 65

QUESTION: With the recent passage of Proposition 65 in California, questions have been raised concerning the uniformity of regulations relating to carcinogenic or toxic substances that may be found in consumer products. Questions have been raised about the tolerance limits and trace elements of such substances and whether federal authority should preempt state control in products available through interstate commerce. What is FDA's position on Proposition 65?

ANSWER: Since the passage of California's Proposition 65 in November, 1986, FDA has been closely following activities relating to the implementation of that state law and its possible impact on FDA programs. The Commissioner wrote to Governor Deukmejian in August, 1987, and testified before California's Scientific Advisory Panel in December about implementation of Proposition 65.

The Agency expressed its strong belief on those occasions that FDA regulated products sold in accordance with federal laws and regulations pose no significant risk to consumers. Because California's Proposition 65 exempts products posing no significant risk from the statute's warning requirements, FDA urged the Governor and the Scientific Advisory Panel to create a general exemption for chemicals in foods, drugs, cosmetics, and medical devices produced in accordance with federal standards and regulations.

In February, 1988, California's Health and Welfare Agency, the state agency implementing Proposition 65, promulgated regulations that basically reflect and are consistent with the views the Agency has expressed. The regulations exempt, at least temporarily, all FDA regulated products being lawfully sold from Proposition 65's warning requirement for chemicals that have been listed by the state of California as carcinogenic.

It remains possible that California will establish particular levels for chemicals contained in FDA regulated products and that warning requirements for these chemicals will be promulgated by state regulation. California's current regulations do require express warning for chemicals that have been listed by the state as reproductive toxicants if a product contains one thousand times less than that warnings necessarily appear on a product's label. Clear and reasonable warnings can be conveyed to the consumer through shelf labeling, public advertising, or toll-free information.

FDA currently has under consideration a petition from the National Food Processors Association that the Agency expressly preempt Proposition 65 as it relates to FDA-regulated products. FDA has not made a decision on this petition. Although the recently issued California regulations indicate that state authorities have made efforts to avoid inconsistent treatment of FDA-regulated products, the Agency remains concerned about the effects of Proposition 65 on its regulatory system. It is too soon to tell how the regulations will work in practice. Moreover, the regulations could be changed at the initiative of the state or as the result of court decisions.

QUESTION: Do you find that if other states were to adopt similar legislation it would be advantageous or detrimental to the American consumer?

ANSWER: It is to soon to judge how the regulations adopted by California will work in practice. The concern the Agency feels about the potential effects of Proposition 65 on its regulatory system would be compounded by similar legislation in many states. FDA hopes that any state adopting similar legislation would attempt, as California has done, to avoid inconsistent treatment of FDA-regulated products, perhaps with similar regulatory exemption. However, the uncertainty about how each state would implement its legislation, and the ability of any state to change its implementing regulations would remain matters for concern. There are two basic reasons why a proliferation of warning statuses by different state legislatures could be detrimental to the American consumer. One is the increased likelihood that consumers exposed to a myriad of warnings will lose the desire and ability to distinguish serious from more remote dangers. Secondly, the cost to national manufacturers and processors of complying with different state requirements undoubtedly will be reflected in the price or availability of products whose labeling is regulated by many different states. The potential burden on interstate commerce is an important concern to FDA.

QUESTION: Should uniform standards be applied in cases of food products, pharmaceuticals, and medical devices? Do you believe sufficient standards currently exist? Where can improvements be made? What improvements are currently underway?

ANSWER: FDA has long supported efforts at uniformity in the federal and state requirements applicable to all the products that the Agency regulates. FDA cooperates with state officials and with organizations such as the Association of Food and Drug Officials to promote uniform statutes, ordinances, and regulations.

With respect to standards for food, drug, and devices, there is substantial consistency between existing federal and state requirements. Where inconsistent state requirements might have presented a potential public health or regulatory problem, as in the case of tamper-resistent packaging requirements, FDA has indicated that the federal standards should prevail. With respect to medical devices, specific statutory provisions preempt inconsistent or additional requirements applicable to devices unless FDA, in response to a petition, grants and exemption from preemption.

Investigational New Drugs

QUESTION: In 1987, FDA approved new regulations for investigational new drugs that enable seriously ill patients to receive the advantage of new therapies at the earliest possible stage in their development. Commissioner Young, would you please provide the committee with a status report on investigational new drugs that have been approved during the past year?

ANSWER: In the short period since the new treatment IND regulations were announced, the agency has received and processed 11 "treatment INDs." Three were approved to proceed, six remain on clinical hold, and two were not acceptable due to important deficiencies in the applications. The three that were approved were cytomegalovirus immune globulin for attenuation of primary cytomegalovirus infection associated with kidney transplantation; ifosfamide and mesna for germ cell carcinoma where first line and salvage chemotherapy have failed; and trimetrexate for pneumocystis carinii pneumonia in certain AIDS patients.

QUESTION: Is FDA monitoring the patient use of these new drugs?

ANSWER: FDA does not monitor patient use per se. Instead, the agency closely monitors the use of these drugs in the trial setting through the immediate review of clinical trial reports and taking prompt action as necessary for the protection and benefit of the patient. Safeguards include such activities as ensuring drug product quality and remaining alert to inappropriate use of drugs in the clinical trials.

QUESTION: What are your findings?

ANSWER: The program seems to be meeting the need which was identified and is proceeding as desired. FDA has processed all of the submissions within the timeframes it established in the regulations. More applications are expected as physicians and pharmaceutical companies become more familiar with the new procedures.

Program Management

QUESTION: Rental payments for GSA leased office space and laboratories are held constant at $25,612,000 in the fiscal year 1989 proposed budget. Under what type of an arrangement is the Parklawn Building leased? When is this contract up for renewal? Is it expected that the rate payment will increase substantially under a new contract?

ANSWER: The Parklawn Building is a conventionally leased building. The current lease will expire on July 31, 1990. It is expected, given the building's proximity to the Twinbrook Metro Station, that the building's owners will want a substantial increase in rent when the lease is renegotiated. The existing lease is based upon an annual rental cost of about $3.70 per square foot, although FDA pays a Standard Level User Charge much higher than that. The changes the Agency pays to GSA include building management costs in addition to the rent GSA pays the lessor. Office space in the general vicinity of the Parklawn Building is being advertised at rates five or six times that amount. New office space on Twinbrook Parkway near Rockville Pike is being advertised at a annual cost close to $30.00 per square foot.

QUESTION: What other office space does FDA have in Rockville? Is this space leased or government owned?

ANSWER: FDA personnel also occupy office space at the following locations in Rockville:

Location	Address	Ownership
Park Building	12420 Parklawn Drive	Leased
Chapman Building	1901 Chapman Ave.	Leased
Twinbrook Building	12709 Twinbrook Pkwy.	Leased
Twinbrook Building	12720 Twinbrook Pkwy.	Leased
Twinbrook Building	12721 Twinbrook Pkwy.	Leased
Metro Park North	7529 Standish Place	Leased
Wilkens Building	12200 Wilkens Ave.	Leased

QUESTION: Please provide a record for the Committee of FDA office and laboratory space by location, number of square feet, type of facility, lease or government owned classification (with expected expiration on lease arrangements), as well as the current annual rate of payment for each facility.

ANSWER: The information follows:

FDA Facilities in the Washington Area

	Space Occupied in Square Feet					
Location	Office	Lab	Storage	Ownership	Lease Expires	Annual Rent 2/
200 C St., SW	90,510	180,135	25,500	Gov't	---	$11,297,574
7529 Standish Pl. (CDER)	41,375	---	---	Leased	12/91	680,205
1901 Chapman Ave.	19,010	19,325	---	Leased	6/92	792,584
12709 Twinbrook Pkwy. (CDRH)	6,655	12,025	355	Leased	1/89	357,691
12720 Twinbrook Pkwy. (CDRH)	28,275	8,385	3,235	Leased	6/92	710,086
12721 Twinbrook Pkwy. (CDRH)	5,795	4,440	840	Leased	1/89	252,927
8757 Georgia Ave.	64,265	---	60	Leased		954,138
Switzer Bldg. (CFSAN)	17,165	---	---	Gov't	---	613,979
CVM Lab Barn	5,046	40,878	1,332	Gov't	---	N/A
12200 Wilkens Ave. (CDRH)	2,388	16,563	790	Leased 1/	3/96	27,500
Beltsville Res. Facility (CFSAN)	---	57,365	---	Gov't	---	N/A
5600 Fishers Ln	395,588	---	---	Leased	7/90	5,237,585
12420 Parklawn Dr	20,684	---	26,762	Leased	3/89	664,314

1/ Leased by FDA directly, not through GSA.

2/ These rates are the 1989 rates as furnished by GSA. However, the Administration is proposing, as Congress has done in recent years, to limit the total amount FDA pays GSA for space rent to $25,612,000. If this proposal is enacted, FDA would be paying GSA about 75% of the total of the individual separate rates listed by GSA

Buildings and Facilities

QUESTION: What is the purpose of the $290,000 increase for the National Center for Toxicological Research?

ANSWER: These funds would pay for essential maintenance and repair projects; including roof repairs, roadway repairs, painting of building exteriors, tuck pointing of masonry, recaulking of windows, etc. Such work is a critical necessity in order to properly maintain the buildings and facilities at the center so as to forestall weather damage and premature obselesence.

QUESTION: How will the $870,000 for the field district and specialized laboratories be divided among the 18 locations nationwide? Will all of the laboratories and offices receive some funding? Please chart how much is proposed for each facility and for what purposes generally.

ANSWER: The $870,000 requested for field district and specialized laboratories will fund the projects described at the following locations;

a.	Winchester Engineering and Analytical Center (WEAC), Winchester, MA; Upgrade HVAC systems in hot lab and hood room	$65,000
b.	New York District Lab; Upgrade vacuum systems, renovate walk-in cooler and freezer, renovate sample room, upgrade HVAC in mass spectrometer lab, and renovate trace metals lab	165,000
c.	Philadelphia District Lab; Install security system for labs, sample rooms, etc	90,000
d.	Chicago District Lab; Install explosion proof light fixtures in volatile solvents extraction room	10,000
e.	Cincinnati District Lab; Upgrade distilled water system, new freezer for sample storage, and handicapped modifications	70,000
f.	Dallas District Lab; Upgrade lab utility systems, install dust collectors, and install five escape stairs from lab and basement	140,000
g.	San Juan District Lab; Install smoke detection and fire alarm systems, upgrade lab electrical systems, and eliminate handicapped barriers	50,000

h. Baltimore District Lab; Upgrade fume hoods to meet OSHA standards	75,000
i. Atlanta District Lab; Renovate lab storage areas, install walk-in refrigerator/freezer rooms, expand sample storage room, install new distillations equipment, upgrade fume hoods to meet OSHA standards	205,000

Not all District Offices receive funding in early fiscal year since funding is based on criticality of need.

QUESTION: What is the purpose of the $145,000 increase for the Medical Devices and Radiological Health Laboratories in Rockville?

ANSWER: The funds requested for Medical Device and Radiological Health programs will cover the cost of miscellaneous repairs and improvements at the Chapman Ave. and Twinbrook Parkway laboratory facilities occupied by the Center to maintain laboratory conditions and perform minor improvements to adopt the labs to current research and testing needs.

QUESTION: What is the purpose of increased funding for the Fisheries Research Branch in Alabama and the Beltsville Agricultural Research Center?

ANSWER: Requested funds will pay for rewiring of the laboratory building to eliminate sporadic short circuiting in the electrical system, renovation of existing space to provide an animal holding area, and other general building repairs.

QUESTION: Will modifications in these facilities be sufficient to accommodate new staff proposed in the Fiscal Year 1989 Budget?

ANSWER: Except for funds requested for construction of an addition to the Building 29A at NIH, none of the funds will provide space to accommodate additional personnel proposed in the fiscal year 1989 budget. The requested funds, in the amount of $1,450,000 are for the maintenance, alteration, and repair of existing facilities and not for expansion of building space.

Decrease of 42 FTE

QUESTION: The only area of the FDA budget slated for significant reductions in full-time staff is in program management activities. Why is FDA recommending a reduction of 42 staff in fiscal year 1989?

ANSWER: The Administration's overall management programs focus on streamlining internal operations and contracting out. These have become essential parts of the overall effort to limit Federal employment and as a partial means of offsetting FTE increase requests. In 1989 FDA proposes to save 42 FTEs by internal efficiencies and contracting for support services.

QUESTION: What are the responsibilities of these staff currently? From what specific areas will the reductions be made and how many from each area?

ANSWER: The responsibilities of the staff possibly affected include some document handling activities and support services some animal laboratory functions, and other routine clerical functions.

QUESTION: How will the functions of these staff be absorbed in the Agency?

ANSWER: FDA believes that the support services are logical candidates for contracting out, and will review these functions for that purpose. If a decision is made to contract these smaller functions then it is our intention that contracting will occur in a gradual fashion as affected employees can be absorbed within the agency, in order to avoid RIFs which would disrupt many parts of the agency.

QUESTION: Without these 42 full-time staff, is FDA likely to experience delays in regulatory ativities? What other areas might experience delays or backlogs?

ANSWER: Since the reduction is to be accomplished not by reducing programs but by the implementation of management and support efficiencies, we do not believe that the reduction of staff would impair our regulatory activities.

Request to Increase Full-Time Employees

QUESTION: The fiscal year 1989 budget proposes to increase the number of FTEs by 287. Of these, 127 FTEs would be recruited to work on AIDS research, while 160 FTEs would work on food, human drugs and biologics, and devices and radiological products. How many of the new staff would be working at FDA Field locations?

ANSWER: Of the AIDS increase, 20 of the FTEs requested would be assigned to Field offices. Of the Food Safety increase, 28 of the FTEs are planned for Field offices.

QUESTION: How many would be located in Rockville?

ANSWER: The 16 FTEs requested for drug review and 51 of the FTEs requested for AIDS work will be located in the Parklawn Building in Rockville or at nearby office at Metro Park on Gude Drive.

The 18 FTEs requested for device review and 8 of the FTEs requested for AIDS will be located at Center for Devices and Radiological Health space in Rockville or in that Center's office space location in Silver Spring.

QUESTION: Aside from the AIDS research personnel, is there sufficient laboratory and office space in FDA leased facilities to house the 160 new FTEs?

ANSWER: There will be sufficient space for these personnel in either leased or government-owned space. In some cases, additional office space will be needed in the Rockville area, which the agency expects to be able to obtain through the normal process of requesting office space. That is, FDA may be able to obtain existing Public Health Service office space, or GSA may need to acquire additional office space in the vicinity.

The 41 FTEs requested for Food Safety work can be absorbed within existing FDA space in Field locations and at the Center for Food Safety and Applied Nutrition at Federal Building 8 in Southwest Washington.

It should be noted that the total increase of 160 FTEs is actually a net of the FTEs requested for AIDS and for other program increases, offset by FTEs to be saved by management improvements. That is , 127 FTEs are requested for AIDS work, 75 FTEs are requested for other program improvements, and 42 FTEs will be saved through management initiatives, for a net overall change of 160 FTEs.

QUESTION: At what locations would expansion of current facilities be required to accommodate new staff?

ANSWER: The only location where expansion is necessary is at the NIH campus, where FDA's biologics-related programs are housed and where much of the agency's AIDS work takes place.

We have already made drastic efforts such as converting some of the restrooms and walk-in freezers into office space to make room for additional staff in Building 29A on the NIH campus and will continue to make every effort possible to house more staff. We are also considering alternatives such as moving office staff and/or support functions to other locations to make laboratory space available there. The new building proposed in our 1989 budget would eliminate present overcrowding and provide space for the requested 48 FTE increase for 1989.

As noted above, some of the FTE increases can be housed in existing FDA space, and except for the new building requested, the others can be housed in office space provided through the normal process of having additional office space assigned to FDA.

New Drug Evaluations

QUESTION: The fiscal year 1989 budget proposes an increase of 16 FTE's for the new drug evaluation process. Will all of the additional staff be working on new drug evaluations or in other areas as well?

ANSWER: Yes, the additional staff will be working directly on the new drug evaluation process. Some of this staff will be assigned to the formal drug review divisions in the Center for Drug

Evaluation and Research and others will perform related functions such as reviewing specific parts of the new drug applications, e.g., biostatistic and pharmacokinetic reviews of the clinical study data in new drug applications will be accomplished in other divisions.

QUESTION: Do you believe that this increase in staff will enable FDA to assure compliance with timetables for review of new drug and supplemental applications pending at FDA?

ANSWER: This increase will not, by itself, enable FDA to meet the congressionally-established timetables but it will help and the increase will be used to that end. Essentially, the review staff is being increased on an incremental basis through internal reprogramming and from resources authorized by Congress. Additionally, under FDA's Action Plan, the agency has initiated and achieved many improvements in the review process that will shorten the time needed to review new drug and supplemental applications. These activities include improved recruitment efforts, publishing revised IND/NDA final rules governing the submission and review of new drug applications, developing guidelines to assist industry in formatting applications, affording more contact with industry in the IND phase, testing electronic submissions, and other timesaving efforts.

QUESTION: Would you please provide the Committee with information concerning the number of applications reviewed, filed, and pending at the end of the past three fiscal years and to date in 1988? Also, please include the number of new drug and supplement applications approved and rejected during these time periods?

ANSWER: The information follows:

NEW DRUG EVALUATIONS

	FY 85	FY 86	FY 87	FY 88*
New Drug Applications				
Number Reviewed	380	284	260	168
Number Filed (Received)	166	124	121	71
Number Pending	263	223	243	225
Number Approved	101	100	77	43
Number Rejected.**	175	125	134	103
New Drug Supplements				***
Number Approved	2118	2077	1452	552
Number Rejected.**	491	613	630	N/A

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* - Through March 31, 1988

**- "Rejected" encompasses all applications which: the agency refused to file, were withdrawn, or were not approvable.

***- Recent reductions in the number of New Drug Application Supplements approved are due to two factors: regulatory changes which have reduced the number of Supplements required to be submitted to FDA, and agency efforts to reduce previous backlogs of Supplemental applications.

QUESTION: Acknowledging the efforts of FDA to recruit medical officers to aid in the drug review process, what would you say are the greatest obstacles FDA faces in hiring and retaining highly qualified medical officers?

ANSWER: The special nature of the work and the fact that most available physicians are untrained in the type of work required by FDA are the major obstacles. In addition, salaries are not competitive, and employment within FDA often does not compare favorably to that of counterparts in the private sector or academia when considering such factors as working conditions, opportunities for professional development, and travel.

FDA is fully committed to improving the quality of the drug application review process and to that end has worked intensively with the Institute of Medicine, the National Institutes of Health, the American Medical Association, and the Pharmaceutical Manufacturers Association to recruit, through fellowship programs and other innovative mechanisms, applicants with the scientific expertise needed to conduct high quality drug reviews. As a result of these efforts, in 1987, the agency not only kept up with attrition but increased the medical officer staff by 14.

Through three separate task forces FDA has studied ways of increasing the effectiveness of the FDA recruitment program for medical officer reviewers, explored the development of a Distinguished Fellow Program, and developed a structured multi-year university-affiliated fellowship program designed to augment the medical officer review staff. Finally, the agency has begun developing training and orientation programs for both new and existing staff members.

Prescription Drug Marketing Act of 1988

QUESTION: On March 31, 1988, Congress completed final consideration of H.R. 1207, the Prescription Drug Marketing Act, and forwarded the bill to the President for signature. This bill would place restrictions on the reimportation of prescription drugs and places restrictions on distribution of drug samples.

The FDA is given additional responsibilities under this legislation for issuing guidelines for licensing of wholesale distributors and approving sample request forms. FDA would also have enforcement authority over drug imports. Commissioner Young, do you believe FDA could achieve the objectives of H.R. 1207 within the budget recommendations already submitted to Congress? Would additional full-time personnel be required to meet the requirements of the Prescription Drug Marketing Act? Would additional funding be required to assure proper surveillance and enforcement of the Act?

ANSWER: Last year, FDA provided a House Energy and Commerce Committee an estimate that it would take 30 FTEs at a cost of $1.5 million to carry out the provisions of this bill. An internal FDA working group is now in place to set procedures for implementing the Act and to reevaluate the resource impact. Not until this review is completed will we be able to provide a better estimate of the costs of enforcing this law.

It should be noted that some sections of the Act are new for FDA, such as the sales restrictions on drug samples and the ban on certain resales of drugs by hospitals and other health care facilities. Other sections are extensions of present programs, such as the ban on the reimportation of prescription drugs produced in this country and the increased regulation of prescription drug wholesalers.

Review of New Device Applications

QUESTION: The Fiscal Year 1989 budget proposed an increase of $1,100,000 and 18 FTEs for review of new device applications. Will these increases assure that all backlogs in device application reviews are eliminated?

ANSWER: FDA is striving to cope with a burgeoning product review and approval workload and prevent the redevelopment of backlogs which were eliminated at the end of FY87. In addition to increasing the Agency's device evaluation review staff, we have implemented administrative changes to reduce the workload and streamline the review process. We are also developing numerous guidance documents for use by Agency reviewers and manufacturers, to identify changes in procedures and policies, and to clarify requirements applicable to the program. Our experience with use of the documents so far has indicated that they contribute to an improved quality of the incoming submissions, which ultimately facilitated FDA's review. In spite of these endeavors, however, the product review and approval workload increases yearly, both in the volume of applications received, and by the complexity of technologies that must be evaluated. FDA will continue to pursue efforts to streamline the product review and approval process and we hope these efforts will also prevent the redevelopment of backlogs.

QUESTION: What progress has FDA made over the past two fiscal years in premarket approval applications and supplements? What is the average current timeframe for review of such applications?

ANSWER: FDA has made significant accomplishments over the past two fiscal years in its product approval program. In FY86, FDA received 69 original premarket approval applications (PMAs) and 478 PMA supplements. In FY87, FDA received a record number of PMAs (81) and PMA supplements (700). The program responded by completing the review of more PMA originals and supplements than in any previous year (549 in FY86, and 611 in FY87). Original PMAs were reviewed in an average of 337 days during FY87, down from 395 days in FY86 and PMA supplements were reviewed in an average of 148 days in FY87, down from 186 days in FY86. In the first half of FY88, FDA has approved 24 original PMAs and 272 PMA supplements in an average of 264 and 132 days, respectively.

QUESTION: What type of qualifications will be required for the new FTEs that FDA expects to hire for Devices and Radiological Products? Will FDA have difficulty in recruiting able candidates? If so, why?

ANSWER: For the most part, the Food and Drug Administration expects to hire scientists with the additional proposed 18 FTEs. The scientific disciplines involved will include engineering (Materials, Electrical, Biomedical, and Electronics), biology, microbiology, chemistry, physics, health physics, and physiology. Recruitment will include candidates ranging from the entry level to the journeyman level. In addition to those scientific disciplines, the Center anticipates recruiting a smaller number of physicians and nurses.

For entry level position, scientists in those areas will, at a minimum, have successfully completed a full 4 year course of study in their discipline leading to a bachelor's or higher degree. They will also be required to have at least six months to one year of professional experience or graduate education related to the discipline for which they are applying. For higher, journey level positions, a greater number of years of professional experience, preferably in the medical device area, or graduate education is required.

In recruiting and retaining able candidates for this area, the greatest difficulty FDA and any federal Agency, faces is competing with the salaries and benefits offered by private industry for the services of well qualified technical people. Although the Office of Personnel Management allows federal agencies to offer higher salary rates to candidates in fields where it is very difficult for government salaries to compete, such as medicine and engineering, federal salaries and benefits for other scientists often lag behind those offered in the private sector.

Another area which poses a difficulty to the recruitment of well qualified candidates is the often cumbersome government recruitment process. In 1987, FDA management took several steps to streamline this process -- especially in the area of new device application review and approval -- and we are confident that a sufficient number of qualified candidates can be found to use the requested staffyears.

AIDS Facilities

QUESTION: What alternatives other than construction did FDA consider to meet its office and laboratory space needs for AIDS related work?

ANSWER: The other alternatives considered were conventionally leased space and acquisition of the needed space by the lease/purchase method. The obvious advantage of both direct Federal construction and lease/purchase is that the needed lab and support space could be constructed immediately adjacent to existing AIDS program space in Building 29A at the National Institutes of Health. Even if FDA were able to locate existing conventionally leased space that was suitable for the AIDS program (an impossible situation) the lab programs would be disadvantaged by being scattered. FDA programs in the Washington metropolitan area are already seriously impacted as a result of fragmentation. It is well known that such fragments results in a host of operational problems, not the least of which is the time lost by personnel traveling from location to another, all of which reduces efficiency.

FDA considered the alternative of lease/purchase or lease/construction for providing the needed laboratory and office space, but abandoned this idea when it became apparent that the Office of Management and Budget did not favor this approach. The lease/purchase alternative is attractive because of low front end costs and a consequently reduced budget impact. Construction funds are provided from the private sector and are amortized through annual lease payments until at the end of the lease term (usually 20 or 30 years) when the ownership of the building rests with the Government.

While conventionally leased space is being considered for some of the administrative functions of the AIDS program, experience has proved that the type of lab space required by the AIDS program is not available in commercial markets. If conventionally leased lab space were constructed to Agency specifications, the cost over time would be greater than with direct Federal construction or lease/purchase and yet at the end of the lease term FDA would have nothing to show but receipts for rental payments. With both direct Federal construction and the lease/purchase mode of acquisition there is a residual value in the building which increases the value of these methods of space acquisition.

QUESTION: Did FDA prepare a cost analysis as required by OMB (Circular A-104), to determine whether it would be most cost effective to lease or build?

ANSWER: An economic analysis, comparing the present worth of the three possible acquisition modes; namely 1) direct Federal construction, 2) conventional leasing, and 3) lease/purchase, was prepared for the project. While direct Federal construction was slightly less expensive than the lease/purchase method of acquisition, conventional leasing proved to be much more costly. The present value of conventional leasing of the space was considerably higher than either lease/purchase or direct Federal construction for three reasons: 1) the cost of purchasing land was factored into conventional lease costs, 2) adjustment for inflation was factored in annual lease payments at the end of the initial 10 year firm term period and again at the end of each 5 year renewal option, and 3) while in the case of direct Federal construction and lease/purchase the building was treated as a Federally owned facility with a residual value whereas the conventionally leased building had no residual value to the Government. Essentially, all one has at the end of a lease term in the case of conventional leasing are rent receipts. There in lies one of the principal advantages of the Federal construction and lease/purchase modes of acquisition. The lease/purchase mode is a method of paying for a facility on the installment plan much as home buyer pays for a home with mortgage payments.

QUESTION: When completed, who will own the property and control the facility--FDA, NIH, HHS, or GSA?

ANSWER: The completed facility will be owned by the Untied States of America, will be controlled by the Food and Drug Administration and will be maintained and serviced by the National Institutes of Health. GSA is not involved with the design and construction or operation and maintenance of buildings and facilities at NIH.

QUESTION: If owned by an agency other than FDA, could FDA lose possession of the space because of other higher priority needs of HHS, NIH, or GSA?

ANSWER: Since funds for the design and construction of the building would presumably be appropriated by Congress specifically for an FDA program, i.e., research and testing associated with the development of AIDS vaccines and biological products to treat AIDS, it is highly unlikely that FDA would ever be asked to relinquish the use of the facility in favor of some other program. However, it is conceivable that at some future time, assuming that the AIDS epidemic had ended, FDA might have to render some space in the building to NIH or another Public Health Service agency if yet another public health emergency arose that did not involve FDA, or if another Agency's program was considered by Congress or by the Secretary of Health and Human Services to be more important than the ongoing work of FDA at the time. GSA would not play a role in making such a decision since that Agency does not control allocation of space at NIH.

QUESTION: Will the new building accommodate more staff than is presently being requested in the FY 1989 appropriation?

ANSWER: The building, as contemplated, will accommodate 100 scientists and 60 administrative and support personnel. It is intended to house all of the research positions for which approval is being requested as well as providing some space for relieving overcrowding in existing Buildings 29 and 29A. The building will not house the total AIDS staff increase being requested, but will handle all of the increase being allocated to the Center for Biologics Evaluation and Research.

QUESTION: Are accommodations being made in the design of the new building to provide for possible future expansion to accommodate new FTE's? If not, where will these employees be located?

ANSWER: The designer for the new building will be instructed to conduct a siting feasibility study that will address possible future expansion, either horizontally or vertically. The site being considered for the addition to Building 29A lies to the west of the building. In addition to this site, there is also some land lying just north of Building 29 where expansion space could be constructed, if needed.

QUESTION: Is FDA satisfied with the level of services it receives from NIH at Buildings 29 and 29A, and are the charges in line with similar charges at other FDA facilities?

ANSWER: FDA is generally satisfied with service and support provided by NIH. The NIH response to FDA requests for service is generally far better than that provided by GSA at other facilities. The charges collected by NIH are based on the amount of space occupied by FDA and since costs are determined on a square foot basis, FDA charges are determined just like those of the NIH institutes which also contribute to the NIH management fund.

FDA Space Requirements

QUESTION: Please provide information on what GSA's rental billing will be for FY 1989 for all FDA occupied buildings maintained by GSA, the number of square feet of space and how this space is being used. (List each separately)

ANSWER: The information follows:

	FY89 Rate 1/	Number of Square Feet	Use
200 C St., SW	$11,297,574	296,145	Office/Lab/Storage
7529 Standish Pl	680,205	41,375	Office
1901 Chapman Ave.	792,584	38,335	Office/Lab
12709 Twinbrook Pkwy	357,691	19,035	Office/Lab/Storage
12720 Twinbrook Pkwy	710,086	39,895	Office/Lab/Storage
12721 Twinbrook Pkwy	252,927	11,075	Office/Lab/Storage
8757 Georgia Ave.	954,138	64,325	Office/Storage
Switzer Bldg.	613,979	17,165	Office
CVM Lab Barn	N/A	47,256	Office/Lab/Storage
12200 Wilkens Ave. 2/	27,500	19,741	Office/Lab/Storage
Beltsville Res. Fac.	N/A	57,365	Lab
5600 Fishers Ln.	5,237,585	395,588	Office
12420 Parklawn Dr.	664,314	47,446	Office/Storage
Boston, Mass.	738,800	46,282	District Office
East Orange, NJ	464,626	19,825	"
Buffalo, NY	372,648	47,632	"
NY-Kings, NY	1,868,447	167,735	"
San Juan, PR 3/	120,190	5,702	"
Baltimore, MD	691,675	46,785	"
Philadelphia, PA	488,280	44,228	"
Orlando, FL	125,052	12,726	"
Atlanta, GA	1,388,357	72,022	"
Nashville, TN	86,900	10,455	"
Chicago, IL 4/	271,334	20,512	"
Detroit, MI	418,289	34,725	"
Minneapolis, MN	553,407	40,734	"
Cincinnati, OH	449,770	56,720	"
Kansas City, MO	391,708	43,370	"
St. Louis, MO	346,969	20,732	"
New Orleans, LA	260,668	20,484	"
Dallas, TX 5/	274,189	38,952	"
Denver, CO	710,262	87,292	"
San Francisco, CA 5/	954,356	36,370	"
Seattle, WA 5/	487,428	38,201	"
All Other	1,393,062	200,603	150 Resident Posts
TOTAL	34,742,500	2,206,833	

1/ These rates are the 1989 rates as furnished by GSA. However, the Administration is proposing, as Congress has done in recent years, to limit the total amount FDA pays GSA for space rent to $25,612,000. If this proposal is enacted, FDA would be paying GSA about 75% of the total of the individual separate rates listed by GSA.

2/ Leased by FDA directly, not through GSA.

3/ Not including labs located at former PHS Clinic.

4/ Not including labs leased directly by FDA.

5/ Information is for current location; new FDA facilities are under construction Seattle and are planned for Dallas and San Francisco.

QUESTION: Has underpaying these charges adversely affected the level of services GSA is providing?

ANSWER: Underpayment of GSA Standard Level User Charges (SLUC) has not noticeably affected the level of service GSA provides. Unfortunately, GSA response to Agency needs is variable, sometimes appearing to depend on location and sometimes appearing to depend on GSA workload. Although FDA has been generally dissatisfied with the quality and timeliness of GSA support, the Agency cannot categorically state that the poor service is due to underpayment of SLUC. Similar complaints have been heard from other Government agencies so it is unlikely that FDA has been singled out for bad treatment.

QUESTION: Should the full amount be paid?

ANSWER: If Congress wishes to fully support the intent of Public Law 92-330, the law which established the Federal Building Fund and created the mechanism of Standard Level User Charges to replenish the fund and to pay GSA's operating costs, then the charges assessed by GSA against FDA should be paid in full. If Congress feels that amounts charged by GSA for rental of space are excessive, the rates should, in fairness, be reduced for all Federal agencies not just FDA.

QUESTION: If GSA were to locate the additional space requested, how do you expect to pay for this?

ANSWER: As the amount of leased space occupied by FDA programs increases or decreases the Agency's budget for GSA Rent would have to be adjusted accordingly.

QUESTION: Please provide for the record a discussion of how being located in a number of different buildings in the Washington, D.C., metropolitan area has affected FDA's ability to carry out its regulatory responsibilities?

ANSWER: Fragmentation of programs in so many different buildings at so many different sites has inevitably resulted in:

- less than optimum use of personnel, equipment, and facilities;
- lost time for Agency scientists, managers, etc. as they travel between locations;
- slower reviews of regulated products;
- diminished quality of pre-market review process because of difficulty in using collective FDA expertise to best advantage;
- consolidation of service and support functions which would improve overall efficiency of Agency not possible so long as FDA is so fragmented.

The scattering of FDA headquarters programs among 23 buildings at 7 sites in the Washington area from near Capital Hill to Silver Spring, from Beltsville to Rockville is inherently inefficient and tends to diminish the Agency's productive capacity. All of FDA's Headquarters Centers--Drug Evaluation and Research, Biologics Evaluation and Research, Food Safety and Applied Nutrition, Veterinary Medicine, and Devices and Radiological Health, have at least two locations at least several miles apart in the Washington area containing separate staffs that need to coordinate.

Reviews are slower and quality of scientific review is diminished for premarket applications of such products as medical devices, drugs, biological products, and food additives due to:

- Specialized scientific personnel being divided among different locations. For example, product reviewers may want to consult with researchers about a particular product, but generally reviewers and researchers are located in different facilities so that consultation takes much longer than it should or may not take place at all.
- Failure to transfer ideas and information from one part of FDA to another. When an FDA drug evaluator has never met an FDA device evaluator, and a food additive petition reviewer has never met a feed additive petition reviewer, then there is a reduced potential, a lost opportunity, to transfer ideas, information, and scientific expertise from one part of the agency to another. This failure to transfer ideas and information can sometimes compound problems faced by FDA in dealing with significant public health hazards, e.g., E-Ferol judgments in the drug area were made without knowledge of information contained in the Center for Food Safety and Applied Nutrition. While there is no guarantee, consolidation would improve the chances of such communication.

- o FDA's various centers becoming more separated from each other at the same time that the jurisdictional and scientific discipline boundaries among the centers are becoming less distinct, e.g., health claims for foods or device delivery systems for drugs. Geographical compartmentalization of scientific disciplines makes less sense each year as more and more frequently the centers must pool their expertise and information before FDA can make a decision about certain issues. This necessary process is made more cumbersome and time consuming because of fragmentation and geographical separation of Agency components.

However, it is difficult to quantify the benefits versus the costs that would result from consolidation.

QUESTION: When do leases for the Parklawn and Park Buildings expire? Under what current terms are these buildings leased? How many square feet is provided in these buildings? For what purposes are they used?

ANSWER: The lease for the Parklawn Building expires July 31, 1990. The Park Building lease expires March 3, 1989. Copies of the leases for the Parklawn and Park Buildings can be obtained from GSA. Space in the Parklawn costs GSA $3.70 per square foot per year. The 1,026,520 square feet of leasable space at Parklawn is costing GSA $3,790,902 annually. Of course the "fair market" rate upon which the SLUC charged to the Federal Agencies occupying the space is far in excess of the $3.70/square foot GSA pays. The lease for the Park Building requires an annual payment of $661,962 for 58,668 square feet of leasable space, or a rate of $11.28 per square foot in annual rental. The amount of space occupied by FDA in these two buildings is as follows:

Parklawn Building.........	395,588 sq.ft.
Park Building.............	47,451 sq.ft.

FDA Property

QUESTION: In what locations does FDA own land? Where is there undeveloped land owned by FDA?

ANSWER: FDA does not own any land outright. All land directly controlled by the Agency is titled in the name of the United States. FDA has direct or indirect control over land at the following locations:

Name of Facility	Location	Approximate Size
FDA Headquarters Complex	Beltsville, MD	220 Acres
National Center for Toxicological Research	Jefferson, ARK	504 Acres
Winchester Engineering Applications Center	Winchester, MA	5 Acres

Milk and Food Research Center	Cincinnati, OH	25 Acres
Fisheries Research Branch	Dauphin Island, AL	4 Acres
Northeast Technical Services Unit	Davisville, RI	1.6 Acres

While there is little room for additional development at the smaller sites, there is considerable room for construction of additional facilities at both Beltsville, MD and Jefferson, ARK.

QUESTION: How much unoccupied land remains at Beltsville?

ANSWER: Of the 220 acres comprising the FDA Beltsville property, only about 40 acres is currently in use, i.e., actually occupied by buildings, roadways, parking areas, or is encumbered by utility easements, etc. We have assumed the remainder would eventually be used by FDA.

QUESTION: Has FDA conducted a comprehensive study to determine (1) the effect of having a headquarters operation physically located in numerous buildings throughout the Washington, D.C., Metropolitan area; (2) what its space needs are now and in the near future; and (3) how best these needs can be met to assure a most efficient and effective operation?

ANSWER: FDA has studied its facility needs many times in the past. In all of the recent studies the fragmentation of Agency programs and personnel has been focussed on and discussed at length, and the undesirable effects of such scattering of resources has been and continues to be acknowledged. Recent plans do show current and near term space needs. As to how Agency space needs can best be met, the most desirable solution would be to have all Washington area programs at a single location where personnel, equipment, and facilities could be used to maximum advantage and with maximum efficiency. However, Federal Agencies like FDA are, unfortunately, forced to practice the "art of the possible" when it comes to construction of facilities. Recent plans bear out the Agency's acceptance of concepts like the grouping of FDA programs at three or four locations in the area, because further consolidation of programs doesn't appear to be possible. The Agency is currently in the process of updating and refining its long-range headquarters facilities plan.

QUESTION SUBMITTED BY SENATOR SASSER

Food Irradiation

QUESTION: I understand that the FDA will soon begin a study on the issue following the 1988 House Report recommendation. I am glad to hear this, and I would like to make one further recommendation. I believe we need a greater public awareness of the process of food irradiation, the need for it, and its short term and long term affects on foods. If food irradiation is to be a commonly great concern among the public. It seems that public education would be one of the main goals of the FDA in this ares. Can you tell me what the FDA is doing currently to heighten public awareness about food irradiation?

ANSWER: FDA has published articles on food irradiation in its magazine, FDA Consumer. The Agency also has responded to consumer letters and has held discussions with consumers at regional consumer meetings. It has sent scientists to speak at meetings, concentrating on those gatherings at which the audience is likely to spread information to others. FDA scientists have also participated in many interviews with reporters. FDA has provided technical review and editorial assistance to the World Health Organization for a book on food irradiation intended for general readers.

Regarding further study on irradiaiton, the House Appropriations Committee Report on FDA's 1988 appropriations recommended $200,000 for a study of food irradiation by the National Academy of Sciences. This recommendation was not included in the Senate Committee Report or in the Conference Report. Nevertheless, the agency did include in the explanatory notes on the 1989 budget request the statement that we intended to carry out this study. In developing plans for this study, however, the agency has determined that the amount of $200,000 will probably not make a significant contribution to the body of knowledge on this subject, and that a more comprehensive study could cost much more. In view of the variety of uses for which irradiation is already approved, with other uses under development, the agency is presently considering whether further studies at this time would be a wise use of funds.

QUESTIONS SUBMITTED BY SENATOR BUMPERS

Impact of Biotechnology

QUESTION: I understand that biotechnology is one of the fastest growing industries worldwide. Do you agree with me that it is absolutely essential for the United States to be competitive in the area of biotechnology?

ANSWER: I wholeheartedly agree that the United States must take the necessary actions to be competitive in this fast growing industry. Overwhelming evidence indicates that biotechnology, along with superconductivity and microelectronics, will be the primary growth areas for the future.

Unless we, as a nation, establish our excellence in this field, we will be left behind in food production, pharmaceutical production, medical advances, and many other areas which will determine our standard of living.

QUESTION: Is the U.S. competitive in the area, or are we being left behind by the Japanese and by some European countries? Where do we stand as a nation?

ANSWER: The United States continues to have the strongest research infrastructure in biotechnology. However, the Japanese and western Europeans are making very intense and committed efforts in this field. In Japan, for instance, the Ministry of International Trade and Industry (MITI) regards biotechnology as a high priority not only with emphasis on moving biotechnical innovations from the laboratory to the marketplace, but also on developing the tools, facilities, and capabilities for basic research. Hundreds of Japanese scientists are spending time in United States' facilities, learning the techniques of biotechnology, recruiting our scientists, and buying ideas as they are developing.

My assessment of where we stand is that we continue to be "idea generators," but could stand to improve our ability to fully develop our products once the basic ideas have been generated. As a nation we need to change our national process of product development, so that we do not have a drain of new ideas that defeats our efforts to continue our excellence in idea generation, as well.

QUESTION: Is there any reason why we could not become number one in the area of biotechnology research and development? What do you see as the potential for biotechnology development in this country?

ANSWER: The potential for biotechnology development in this country is unparalleled. With our extremely strong research infrastructure, the creative genius of American scientists, and our collective creative bent, we have nearly unlimited potential. The only reason I see for our not becoming number one in the area of biotechnology research and development is our need to improve our present development processes.

QUESTION: What specific steps can we take to move biotechnology development forward, and what role could the Food and Drug Administration play?

ANSWER: Research in the area of U.S. competitiveness indicates that there are many barriers to the marketing of American technology, in general, and biotechnology specifically. The considerable research done by several U.S. economists and industry leaders has identified problems in competitiveness that are especially true for biotechnology.

For instance, the experts say that the U.S. lacks a national cooperative process which supports the development of new ideas in biotechnology through to product marketing. Several economic factors such as the focus on short-term profits and inadequate capital for expensive, long-term research such as that required in biotechnology serve as barriers to successful product development and marketing. This is especially true in the area of biotechnology because the equipment and facilities required for safe development are extremely expensive. It is, therefore, difficult to show a return-on-investment in the short term in a field where the construction and equipping of specialized laboratories with devices that become obsolete very quickly are required. The expense of such an effort is prohibitive to all but a relative few. We have also learned from others, especially the Japanese, that the adversarial relationship that has existed in the United States between government and industry serves as an additional barrier not experienced in some other countries.

While other countries are focusing governmental efforts on assisting industry in their product marketing, we are just beginning to do so in this country, and at a much lower level. The relatively recent emphasis on the transfer of technology from Federal laboratories to the private and academic sectors is a step in the right direction, but only a step. I believe there is a greater need to make government facilities available to private industry in research and development activities, and to serve as a catalyst for the development of truly cooperative programs between the public, private, and academic sectors.

The Food and Drug Administration can participate in these activities, as can any other Federal scientific laboratory, by recognizing that our laboratories are national resources. Because biotechnology is already having a major impact on the development of products which FDA regulates, it is imperative that FDA maintain a research expertise in the fields of biotechnology in order to have the knowledge necessary to approve new pharmaceuticals, new food products, and other items regulated by FDA in a minimum of time. In addition, FDA is implementing the Federal Technology Transfer Act of 1986 and developing creative mechanisms for collaborative arrangements between industry, academia, and government.

QUESTION: What are the current barriers to full development? Is it a matter of stifling regulation, lack of appropriate research facilities, lack of creativity, lack of public-private cooperation, or what?

ANSWER: Although I believe that the unusual level of concern over the products of biotechnology is unjustified, it is imperative that we follow every prudent scientific practice in working in the field of biotechnology to assure the safety of our environment, our food and drug supply, and animal and human health. In order to assure safety it is also essential that we have safe and secure facilities in which to conduct the work. As mentioned earlier, the expensive facilities and equipment required for safe and effective biotechnology research and development activities serve as a barrier for many. American scientists continue to prove their excellence in creativity, but I do believe that our efforts at public-private cooperation could be improved.

Biotechnology Research Facilities

QUESTION: I understand that biotechnology research requires specialized facilities in order to protect the environment from accidental release of products. What type of space is required for biotechnology research and development?

ANSWER: Numerous university laboratories around the country which are conducting most of the beginning research work critical to this field are finding more and more frequently that they need to shut down antiquated laboratory facilities until they can be brought up to proper standards. The recognition of the inadequacy of many of the university labs for this purpose could have a profound effect upon biotechnology work. Inadequacies in these laboratories are frequently related to the need to improve their capacity to contain chemical and biological products in a way that assures protection of the environment and public health.

As far as I am aware, most of the successful firms involved in biotechnology research have designed adequate facilities. These facilities are of the type that are very expensive to construct because they are designed to contain the accidental release of biological and chemical products. Such facilities require specialized air handling equipment to sterilize air to prevent the release of agents through walls, the sterilization of all waste water, and the assurance that hazardous products and chemicals will not escape from the lab other than through well-recognized, environmentally-safe procedures.

QUESTION: One of the finest research institutions in the country is run by FDA and is located in Pine Bluff, Arkansas--the National Center for Toxicological Research. It has approximately 400,000 square feet of unused and what I am told is very unique space originally constructed years ago by the Army for the containment of biological warfare agents. To be usable, the space would require extensive renovation, but I am told that space that is so secure is truly unique.

I understand that such secure space is also prohibitively expensive to construct--in the range of $1600 per square foot--but that existing space can be renovated for a tenth that amount. Are you familiar with this space at NCTR, do you think it can be renovated, and, if it was renovated, to what potential use might it be put to make us more competitive in the area of biotechnology research?

ANSWER: I am indeed familiar with the space at NCTR, since I have visited there on numerous occasions and reviewed the excellent research being conducted there. Indeed, this space, as originally constructed, was part of the U.S. Army Pine Bluff Arsenal's biological weapons facility. It was very well designed for the containment of those biologicals for military use which simply could not be allowed to be released. This type of space would be valuable for use in fields related to biotechnology.

That space has significant potential for use in biotechnology research and development. It represents a national asset and a national resource which, with some creative thinking, could be utilized by entities that could not otherwise afford access to such space. For example, we are considering whether a small business which might find construction of its own laboratories to be prohibitively expensive to construct might be able to use space at NCTR that could be renovated for less than the cost of new construction, not including the cost of land, the provision of utilities, and site development. (When these items are included, the renovation costs become a smaller fraction of new construction costs.) It might be possible to lease the use of the space to small businesses that could not otherwise afford to develop the technology themselves. Such an arrangement would allow a firm to engage in the development of a technology that would have been otherwise dropped, or the opportunity for such development may prevent the firm from selling out to a foreign firm who has the required facilities.

QUESTION: Do you see a need for the kind of facility that might be created by the renovation of the secure space? Do you believe that there would be demand for such space?

ANSWER: I see a very strong need for this kind of space and believe that there are several types of activities that would be drawn to it. As I discussed earlier, it would attract the small firm that cannot afford to renovate its space and would otherwise be unable to conduct the research and development activities of which it is capable. Second, university laboratories might need access to such space. The opportunity for scientific interaction and stimulation would also be a strong drawing card.

QUESTION: All of us are concerned about our annual deficits, and in these times it is very difficult to talk about the expansion of any existing program. But, if the situation is as you say, as a nation we really have no choice but to become more competitive in the area of biotechnology.

Do you think it would be possible to become more competitive through the development of a national biotechnology cooperative at NCTR that would in the long term be budget neutral or even budget reducing?

For example, do you think that biotech firms and researchers could work together at a common unique facility renovated initially by the government and leased to private enterprises at a rate that would fully reimburse the government for its costs?

ANSWER: I believe that we should consider such a facility. I believe that the facility might offer opportunities for our best academic, governmental, and private scientists to interact, with one another, utilizing common equipment that is very expensive to obtain, but could be maintained at state-of-the-art capability at such a facility. At present, however, we do not have legislative authority to enter into such leases.

QUESTIONS SUBMITTED BY SENATOR COCHRAN

Biotechnology

QUESTION: Some concern has been expressed to me regarding the current resources available to the CVM. In your opinion, is there sufficient scientific manpower in the Center for Veterinary Medicine to allow for the kinds of continuing education and involvement in research activities that are necessary for scientists to keep up-to-date?

ANSWER: We agree with the concern; the current manpower levels are simply inadequate to allow time for involvement in the kinds of continuing education initiatives and research activities that are essential for scientists to keep up-to-date in their respective disciplines. Failure to provide adequate manpower levels could inevitably result in a declining science base and ultimately to less timely and lower quality decision making on human and animal health issues. Additionally, in order for the Center to meet the upcoming demand for research in the area of biotechnology there will be a great need for additional resources. Microbiologists, immunologists, chemists, and endocrinologists with training and experience in biotechnology will be required to evaluate the expected increase in products of biotechnology. However, we must point out that there are always more scientific opportunities than resources allow. We have not identified offsets within the budget request that would be necessary to accomodate program increases and remain within the Bi-Partisan Budget Agreement ceiling.

QUESTION: I am interested in the biotechnology activities in the animal health industry. I understand there are a great many products projected to be commercialized during the next two to five years. Does the Center for Veterinary Medicine have the necessary base of scientific resources and manpower to cover the expected influx of biotech product applications?

ANSWER: The Center for Veterinary Medicine worked with FDA's Office of Planning and Evaluation to survey the use of biotechnology for veterinary products. This study was conducted to assist agency and CVM management in resource planning and policy decisions. The results of that study are contained in a report entitled, "Emerging

Developments in Veterinary Biotechnology," that was published in July 1986.

Several years ago CVM started preparing to meet the needs which biotechnology would bring by training existing employees and initiating the aforementioned study. CVM has continued to train employees and work with the biotechnology industry to stay abreast with scientific advances. A CVM committee is currently examining current and future specific needs. Their objective is to develop a plan which CVM can use to meet the additional needs biotechnology products will bring.

Drug Residues

QUESTION: I understand that the whole area of drug residues and of analytical testing methods for detecting drug residues in meat, milk, and eggs is a major concern for the CVM. Are the resources available to the Center--particularly manpower--sufficient to ensure that there will be no delays in the validation of test methods developed by drug sponsors, and to ensure that the Center's efforts to update existing test methods and to develop new methods where advancement in the science dictate, will be accomplished in the most timely fashion?

ANSWER: Analytical testing methods for detecting drug residues in animal derived food products are a major concern of CVM. Products for use in food producing animals are required to have analytical methods for detecting unsafe residues. Not only is it necessary to keep up-to-date on the new and upcoming technology in detection methods; there is a greater need to apply this technology towards updating or improving older methods currently being used. As a result of the new technology and the new technological methods used in the detection of these residues, manpower such as chemists with training and experience in the field of biotechnology to review and test these methods will be needed. With current demand for such individuals in the private sector, the government will have difficulty recruiting and hiring such expertise.

Sulfamethazine

QUESTION: The high rate of violative residues of sulfamethazine in hogs being offered for slaughter represents a major crisis in that industry today. I am told that an essential element in the solution to this problem is more effective follow-up on violators by FDA. Is the manpower available in the CVM and in the field up to the task of assuring that every violation detected at slaughter is investigated at the farm level?

ANSWER: Currently, CVM's tissue residue program allocates 23 FTE's to conduct approximately 400 tissue residue follow-up investigations per year. The high rate of sulfamethazine violations recently discovered has required diversion of CVM's entire investigational resource of about 100 FTE's to residue follow-up. Current projections of swine tissue violations, based on a 5% maximum violation rate and increased in-plant testing by FSIS, would result in 400-600 violations per month. Consequently, human resources currently available to CVM would provide 12% of the capacity necessary to investigate every violation detected at slaughter. FDA is working with several States to assist in conducting investigations, and is developing contracts with some States for this purpose.

Aspirin Health Claims

QUESTION: I understand that FDA has objected to the claims that an aspirin a day reduces by half the risk of heart attacks in healthy men which was reported in the January 28 issue of the New England Journal of Medicine. Commissioner, would you please comment on this study and indicate what FDA's position is on this claim?

ANSWER: Preliminary results of this study, which appears, based on current information, to have been well-designed and well-conducted, suggest that an aspirin or buffered aspirin every other day can reduce the rate of initial heart attacks in men, an encouraging finding in the quest to reduce the ravages of heart disease. However, the death rate in the study population was low, about the same in both placebo and aspirin takers, and there appeared to be an increased risk of serious hemorrhagic stroke among the aspirin users. A full report of the study must be completed, made available to the medical community, and evaluated by FDA before aspirin can be properly labeled to take into account the potential risks and benefits associated with such aspirin use. Until that time, promotion of the routine use of aspirin as a heart attack preventive is premature.

FDA is working in close cooperation with the Federal Trade Commission, which is responsible for the regulation of advertizing of over-the-counter drugs, on this matter.

Food Safety Issues

QUESTION: What are the most important food safety issues facing FDA today and in the next few years? Is the agency adequately positioned to meet these challenges?

ANSWER: FDA is cognizant of three ongoing influences affecting contemporary food safety. The first is its emerging scientific understanding - coupled with consumer awareness - of the relationship between diet and health. Diet is now recognized as a significant factor in four of the ten leading causes of death in the United States: heart disease, stroke, cancer and diabetes. So important is this recognition, that nutrition goals were described in the Surgeon General's 1979 report on disease prevention. The strategy for achieving these goals was presented in _Promoting Health/Preventing Disease: Objectives for the Nation_.

These developments have dramatically affected FDA as it responds to the need for applied nutrition research in support of policies and programs. FDA has been assigned primary responsibility within the Department of Health and Human Services for monitoring the Federal Nutrition objectives and refining their implementation.

A vital aspect of the diet-health connection of special concern to FDA is the resurgence of issues involving microbial hazards in our food supply. This issue is especially important as changes in demographics and lifestyles affect eating habits. Today, for example, our society is highly urbanized; more women have entered the workforce; and demand for convenience and quality in foods is great. As a result, food preparation and processing- and concomitant responsibilities for quality and sanitation - are moving from homes to commercial establishments.

The number and severity of recent foodborne disease outbreaks has steadily increased over the last decade. Our scientists estimate that about 33 million cases of foodborne illness occur annually in the U.S. Adding to concern is the possibility that diarrhea-related gut absorption and other phenomena may lead to chronic, debilitating diseases such as allergy, autoimmune disorders and neoplasia.

A modern view of food safety must consider the relative importance of various dietary influences on health and weight the relative risk of both natural and man-made contaminants. For over twenty years, our Total Diet Studies at FDA have shown that intakes of pesticide residues measured through the study are consistently well below acceptable daily intakes established by the World Health Organization. Nevertheless, FDA must continue to carry out a strong program to police and prevent illegal pesticide residues in the food supply so that risks presented by dietary exposure to these substances will remain low. FDA is taking a number of steps to assure coverage of the myriad pesticides and food commodities produced domestically and imported into the United States. Again, these steps involve basic science. For example, the Agency is expanding the number of chemicals covered in the multiresidue methods on which it relies to analyze individual food samples for many different pesticides. Where feasible, FDA is developing more of these methods for newer pesticides. In collaboration with the environmental Protection Agency (EPA), FDA will ensure that methods are available for rapid assay when new pesticides are introduced. The Agency is also investigating the applicability of immunoassays as quick screening methods for pesticide residues in foods.

In other efforts, FDA is revamping its management of data on chemical contaminants. This is needed to efficiently organize the voluminous information accumulated through its monitoring efforts so that the Agency and others outside FDA can use it for evaluating the safety of the food supply and planning food protection programs. To further increase its monitoring effectiveness, FDA is integrating information on foreign pesticide usage by country with volume of individual foods imported from these countries.

At the same time, FDA must also weigh actual, sometimes life-threatening hazards such as foodborne illness which, according to a study by the Carter Center at Emory University, may lead to an estimated 9,000 deaths annually in the U.S. Within this context, FDA believes that microbial contamination of food has the potential to be a continuing, significant problem, and for this reason, it has received major emphasis in our activities.

The second influence on modern food safety is the complex nature of today's food marketing system. A paradox within this system is the simultaneous fragmentation, food processing is nearly 50 different industries ranging from meatpacking to chewing gum, and concentration of U.S. food manufacturing industries. This paradox means that FDA must by prepared to deal with diverse companies producing a spectrum of products and at the same time remain alert to the potential health impact of developments deriving from new processing technologies.

The globalization of the food system also contributes to its growing complexity. Of particular importance to FDA is the dramatic change in the nature of food imports entering the U.S. in the last ten to fifteen years. Imported products used to be primarily bulk, raw materials which could be further inspected during domestic processing. Today, more imports are in the form of ready-to-use consumer articles. The amount of imports is increasing as well. The total number of imported entries under FDA's jurisdiction grew from 500,000 to 1.4 million since 1971 and is steadily increasing. These changes point to the need for new and innovative import control strategies.

The third influence is the dynamic nature of the food marketing system. This characteristic arises from both economics and science. In 1985, the food and beverage industry, with 480 mergers, ranked near the top of all manufacturing industries in the number of mergers. This vigorous restructuring is prompting a short term focus on product development, an activity of interest to FDA as new products emphasize nutrition and health messages.

Restructuring also may be accelerating the emergence of automation an~~d technic~~al sophistication within the food industry. This trend challenges FDA to keep abreast of computer architecture, sensors, advanced controls, and other technologies now entering the food industry. The critical importance of meeting this challenge was demonstrated in 1985 through the largest recorded outbreak of salmonellosis in the U.S. The enormity of this outbreak, due to salmonella typhinurium in 2% lowfat milk, explains, in part, FDA's interest in the growing complexity and dynamics of the food system. The dairy involved was large. It contained five miles of piping and could process 1.5 million pounds of raw milk daily. It served as a sobering signal of the potential that technologically sophisticated, big operations carry for introducing - on a grand scale - problems difficult to spot.

The scientifically propelled dynamics within the food industry will affect FDA in two ways, through: (1) introduction of new products and new processes; and (2) unfolding knowledge about diet-health relationships and the molecular mechanisms of disease. FDA must be prepared to address an array of new food additives likely to emerge from biotechnology. The Agency must also be prepared to understand the effects of formulation, processing, preservation, storage and packaging on the microbial, nutritional and chemical quality of food, and to link these effects to their implications for health. How, for example, will fabricated foods or synthetic substitutes of macronutrients affect traditional dietary patterns and the availability to micronutrients? We at FDA also must be prepared to address the increasingly important issues related to macro food constituents, issues like the role of fat and fiber in health.

Biotechnology may soon offer a virtual cornucopia of new or modified food products. These products will present fundamental questions about FDA's threshold of regulation: which products may be considered "traditional foods"?; which may be considered "Generally Recognized as Safe (GRAS)"?; and which must undergo premarket review through the food additive petition process?

To assure that the delineations of these thresholds are based on solid science, FDA needs basic understanding about food composition. FDA will be examining the health effects of natural food constituents and the factors affecting food nutrients. With outside laboratories, the Agency plans to develop methods for measuring the biologically active forms of nutrients, vitamins, and components of dietary fiber. Other studies will examine the effects of processing on foods and the role of non-nutrient components in food quality before and after processing.

Packaging innovation plays an important role in the food industry. FDA, long aware of this fact, has frequently observed that, by far, the vast majority of the additives it regulates are of the "indirect" type which often involve packaging materials. Because indirect additives number in the thousands, keeping abreast of relevant scientific information about them is a formidable task. FDA will establish a comprehensive computer database on the migration of chemical substances from food packaging materials. A basic set of data on packaging materials will not only assure regulatory decisions based on current science, but also save review time.

FDA's interest in packaging technology extends beyond chemistry to microbiological safety. To satisfy its goal of preventing problems before they occur, the Agency will be investigating pathogen growth and toxin production in various extended shelf-life foods, such as those packaged in modified atmospheres. Pathogens such as Aeromonas, Listeria, and Yersinia which can grow at refrigeration temperatures, will receive careful scrutiny.

All of these influences point to the need for continuing an active strong food safety program at FDA. They also point to an urgent need for basic understanding about the universe of food-related products and activities subject to FDA's authority. If FDA is to prepare for the twenty-first century, it must act now to establish a baseline of scientific knowledge and regulatory principles to address emerging issues. It must, for example, establish basic principles for delineating thresholds of regulation; for discriminating trivial from significant risks; and for making timely, well-informed decisions about regulatory actions. This need is especially pressing in the area of foodborne illness, where some analytical methods provide little, if any, quantitative insight and may take weeks to perform.

If FDA is to embrace a modern concept of food safety through examining the interactive health effects of microbial toxicity, chemical toxicity and nutritional status - then it must possess very basic knowledge about issues concerning this trinity of interests: basic knowledge about food composition; pathogenic mechanisms; processing effects, and other information related to the fundamental nature of our food and human physiology. FDA must also have the modern methods required to fulfill its mission.

In response to these needs, food safety emerged as an extremely important element of Action Plan Phase II (APPII), ranking fourth in our eleven-point program. This element carries a theme emphasized through APPII. It illustrates FDA's responsibility to identify and resolve problems, and its obligation to prevent health problems before they occur.

Within this framework, the food safety initiatives of APPII aim to strengthen the basic science and improve the basic processes at FDA necessary for assuring a safe and wholesome food supply.

FDA will continue to address these food safety issues through the Action Plan Phase III process which is now under development. FDA believes that through the action planning process and with the resources asked for in its budget requests the agency is and will be adequately positioned to meet these challenges.

Imported vs. Domestically Produced Products

QUESTION: From time to time I hear concern expressed about whether there is a single level playing field in this country for both domestically produced and imported products, i.e., does FDA treat one product differently from another? Does this concern you and what are you doing to protect the public from potentially hazardous imported products?

ANSWER: Although FDA requires both domestic and imported products to comply with the same laws and regulations, the actual monitoring is different due to essential differences in FDA contact with the products. Although domestic manufacturers are subject to FDA inspection at the manufacturing level, it is impossible to achieve any type of continuous monitoring of domestic manufacturers. Inspections are sporadic and based on previous inspection information, consumer and competitor complaints and general surveillance. Domestic inspections are supplemented by testing of product samples.

In the case of imports, each product is brought to our attention, at the point of entry, so that a decision can be made to release a product or detain it based on an appearance of a violation. Actually, this gives FDA a significant advantage, in some cases, over imports that it does not have over domestic products.

FDA is able to sample a small percentage of both domestic and imported food products. However, because we cannot inspect foreign firms, because of concern about pesticide residues in imported products, and because we are concerned that some foreign firms may lack sanitary processing conditions and lack knowledge of U.S. regulations, FDA has increased its surveillance of imported foods. From 1984 to 1988, FDA has increased the staffyears devoted to imported food surveillance by 40 percent. In addition, the Agency is requesting an increase of 41 staffyears in Fiscal 1989 to further expand its coverage of imports.

Center for Drugs and Biologics

QUESTION: In your testimony you stated that you have divided the Center for Drugs and Biologics. What is the purpose of this reorganization and what are the major issues facing these two new centers now and in the next few years?

ANSWER: The challenge of combating the AIDS virus in the most efficient manner led to the implementation of several management modifications, one of which was the division of the Center for Drugs and Biologics into two separate centers. The agency has also reorganized the drug and biological review offices in order to focus attention better on AIDS therapies. Within the new Center for Drug Evaluation and Research a new Division of Anti-Viral Drugs has been created specifically to concentrate on reviewing potential antiviral and other anti-infective therapies being developed to combat AIDS. In response to an anticipated boom in new AIDS biologicals resulting from developments in biotechnology, the creation of a new Division of Cytokine Biology is being planned within the Center for Biologics Evaluation and Research which will contain several laboratories capable of in-depth study of cell biology, immunology, and other possible keys to understanding AIDS.

The major issues facing both these offices today and in the next several years are:

- o Increasing number of applications for approval to test new AIDS drugs, diagnostics and vaccines. As research increases the potential for finding a treatment for AIDS, FDA's ability to review the new products expected to flow from this research must increase concurrently, so that the agency never forms an obstacle to the successful development of AIDS treatments.
- o Expanded use of experimental drugs under the "Treatment IND" regulations allowing broader use during the second phase of clinical testing of drugs for immediately life-threatening diseases requiring more intensive monitoring of the clinical trial reports.
- o Continued efforts to expedite the review of all New Drug Applications and related applications, especially in view of anticipated increases in applications as a result of biotechnology research.

FDA Laboratories

QUESTION: I realize that FDA laboratories play a critical role in your efforts to protect the public health. Please provide for the record your assessment of the state of your laboratories and automated equipment needs and how you are addressing them.

ANSWER: FDA's product approval and standard-setting activities, as well as its enforcement and surveillance activities, depend on a strong scientific capability. One of the most critical factors in maintaining this capability is the base of laboratories equipment the Agency's scientist must have.

Meeting FDA's need for laboratory facilities is a multi-faceted problem. For our Field laboratories, FDA has been successful in upgrading or replacing its aging District laboratories in many cases. For example, a new New Orleans District laboratory was constructed in 1978, and FDA has renovated a former PHS clinic to meet our laboratory needs in San Juan, P.R. We have also occupied new laboratory in Chicago and Denver in recent years, and a new laboratory for FDA is now under construction in Seattle. For our laboratory needs in Dallas, Los Angeles, and San Francisco, the agency is in various phases of obtaining replacement space which will meet our current testing needs.

The Agency has long been aware of the need to replace and consolidate many of its Headquarters laboratories. An example of this need is the current construction of Module #1 of new headquarters laboratories in Beltsville, which will replace animal-related laboratory space in Federal Building 8 in downtown Washington. Of course, the agency's FY 1989 request includes a request for $25 million to build a new building for FDA's expanding AIDS-related staff, to be located at the NIH campus. The Agency is currently in the process of reviewing its long-range facilities needs in order to determine its next building priorities.

Carefully planned and properly timed equipment procurements are essential to all of FDA's laboratory programs. FDA must be able to operate at the "state-of-the-art" scientifically in order to meet its responsibilities for protecting the public health. Further, there will be a new range of products based on recombinant DNA technologies, which are expected to have a major impact on all of the areas in which FDA has premarket approval responsibility; thus, virtually all of FDA's major components will have to develop an entirely new level of expertise and regulatory technique. If this challenge is to be met successfully, adequate equipment is needed. Without it innovation would be stifled, as evaluation and approval of new products could be delayed while FDA sought to develop the necessary knowledge.

Annually, FDA spends about $25 million on equipment purchases. New equipment of instrumentation is purchased primarily to replace or update existing items that are worn out or have become obsolete. At the same time particularly with the more complex analytical devices, the technology has been advancing so that the new devices available can improve the accuracy of tests, expand the range of test functions, and/or improve productivity. These developments are often intertwined-just as when someone trades in an old car for a new one, he not only gets a new car with fewer service requirements but also may acquire new features and also improved fuel economy. New scientific equipment is constantly needed to replace outdated or unserviceable items, obtain new equipment which is more accurate and serves more functions than older models, increase the productivity of laboratory professional and technical support staff, and obtain new types of equipment needed to evaluate products produced by new technologies. The Agency's current inventory of scientific and technical equipment includes over 20,000 items, with an estimated replacement value of well over $200 million.

FDA's many field laboratories particularly need up-dated scientific instrumentation capable of expanding the range of test functions, and improving the accuracy of those tests. Imports from Mexico, for example, must be examined in a timely fashion for range and accuracy of testing methods that can be used. In such cases Gas Chromatographs costing from $50,000 upward are used typically for analysis.

There are also a few items which are needed primarily to study new products or technologies such as the Cell Sorter Facility, to monitor the biological effects of recombinant DNA, the Phased Array Scanner to evaluate ultrasound, the Collision Chamber, for use with a Mass spectrometer to identify the purity of products cloned from recombinant DNA, and the quantitative Energy Dispersive X-ray machine, to detect substances being viewed under an electron microscope.

The diversity of FDA's programs is also reflected in the variety of its automated information systems. While economy and speed of information handling are the most obvious benefits or automation, most ADP applications support program activities that could not be effectively carried out within them. Automation enhances laboratory testing and research, makes possible the conduct of regulatory actions within reasonable time frames, and is essential to the planning and monitoring of field resources. Moreover, the automated capacity to access, communicate, and cross-reference this information makes possible a level of interaction among Agency functions which would not exist without these information systems.

QUESTIONS SUBMITTED BY SENATOR KASTEN

Cranberry Juice Labeling

QUESTION: Dr. Young, I have a couple of questions about the cranberry juice labeling controversy. My understanding is that the public comment period for the regulation that would repeal the juice content labeling requirement has expired. Final FDA approval of the regulation has not been made yet; I had understood that it would be forthcoming sometime in August. I have been told, however, that this approval may be delayed until this fall, possibly as late as November. I'd like to ask you if this is true, and if so, why?

ANSWER: This issue has turned out to be much more controversial than FDA anticipated when the proposal was published in the FEDERAL REGISTER on July 16, 1987 to revoke the common or usual name regulation for diluted fruit or vegetable juice beverages, other than diluted orange juice beverages (21 CFR 102.33). The comment period closed January 27, 1988. Over 1,200 comments, the large majority opposed to the revocation, were received in response to the proposal. The comments include substantial opposition from manufacturers of diluted fruit and vegetable juice beverages, state consumer protection offices, members of Congress, and consumers. Full review and evaluation of these comments is currently being undertaken by the Center for Food Safety and Applied Nutrition. Due to the number of comments and the level of opposition, the Agency is currently projecting January, 1989 as the earliest date for completion of action on the revocation proposal.

QUESTION: Dr. Young, you know how long this issue has been kicking around. It's time it were finally resolved, and I'm disturbed at the reports I've been getting of yet another delay in resolving it. The cranberry industry has had this silly labeling hanging over its head for years now. Enough is enough. Can you assure me that FDA will have completed action on this regulation by August of this year?

ANSWER: FDA is aware of the long period of time that the dispute over the labeling of diluted juice beverages has been unresolved. As described in our previous response, due to the substantial opposition to the revocation proposal expressed in the comments, the Agency cannot assure you that it will complete action on the revocation proposal by August of this year. However, FDA can assure you that it is committed to resolving this labeling issue as expeditiously as possible. FDA has, therefore, assigned this issue a high priority for action among the non-health issues that the Agency must address.

QUESTIONS SUBMITTED BY SENATOR GRASSLEY

TPA

QUESTION: There is a lot of interest in the medical and hospital community in the new heart drug to which you referred in your statement ---T.P.A. This is especially the case among the rural hospitals in my state because they don't feel the D.R.G. reimbursement they get under the medicare program is sufficient to allow them to use this new drug, whereas the urban D.R.G. rates are large enough to allow use of this drug, or to allow the hospitals to get paid enough to cover the expense of using it.

I know FDA has nothing to do with reimbursement policy under Medicare. I want to ask a somewhat different question which I understand will probably require an answer which is somewhat conjectural or speculative. What is likely to happen to the cost of this drug? Does your experience with the cost trajectories of new drugs provide you with any basis on which to say whether the cost of this drug will tend to come down from its average cost for heart therapy of around $2300 and how long will it take for this to happen?

ANSWER: The cost of TPA will vary dependent upon whether additional manufacturers are licensed to produce this agent and/or whether other thrombolytic agents are approved for use in acute myocardial infarction (AMI) or other thrombotic diseases. Streptokinase, for example, is another drug which is licensed for intravenous administration in AMI and, currently, costs less than TPA. Studies are underway which will directly compare the effectiveness of TPA and Streptokinase. These studies may have an impact on the cost of TPA if results demonstrate that the two drugs are comparably effective. In any case, there is no doubt that the price of new recombinant derived products reflect the extensive research and development required as well as the high expense of their production.

Food Irradiation

QUESTION: The FDA budget submission states that FDA will be able to award a contract using fiscal year 1988 funds for the study required by Congress on meat irradiation. Are you able to describe for me the state of our knowledge on this question of whether irradiated foods are safe? Is there a substantial literature on this subject, and, if so, is there a high degree of consensus on the safety of this technology or is there dissensus?

ANSWER: There is a very large body of literature resulting from well over 30 years of research on the safety of this technology. This research has included study of the chemical effects of radiation on food and nutrients, the microbiological effects of radiation on food microorganisms, and the effects of feeding animals a diet of irradiated food. Much of the early research was plagued with problems that resulted from a lack of complete understanding of the food needs of animals. Those problems stimulated further research, which in turn led to increased knowledge of the food science applicable to non-irradiated as well as irradiated food.

In 1980, a Joint Expert Committee on Food Irradiation, sponsored by three United Nations organizations (the Food and Agricultural Organization, the International Atomic Energy Agency, and the World Health Organization), concluded that the irradiation of any food to an overall average dose of 10 kilogray (kGy) causes no toxicological hazard and introduces no special nutritional or microbiological problems. In 1983, the Codex Alimentarius Commission, then representing 129 countries, adopted the Codex General Standard for irradiated food based on the Joint Expert Committee's recommendation. There was broad support for this action. Only two countries expressed reservations. Since 1980, several countries have conducted their own evaluation of the food irradiation safety literature, and they have all agreed with the Codex conclusions.

Thus, a strong consensus exists that no adverse health effects attributable to irradiation of food have been shown. As with all other food processes, food irradiation must be applied properly, and the food itself must be handled according to good food handling practices, to ensure a safe product. However, the factors affecting food safety are sufficiently numerous and complex to require continued research on all types of food processing, including irradiation.

FDA's current regulations permit application of irradiation up to a dose of 1 kGy, one tenth that recommended by the Codex. Minor dry ingredients may be irradiated at a dose at up to 30 kGy. At this time, only minor dry ingredients are irradiated commercially in this country.

Regarding further study on irradiaiton, the House Appropriations Committee Report on FDA's 1988 appropriations recommended $200,000 for a study of food irradiation by the National Academy of Sciences. This recommendation was not included in the Senate Committee Report or in the Conference Report. Nevertheless, the agency did include in the explanatory notes on the 1989 budget request the statement that we intended to carry out this study. In developing plans for this study, however, the agency has determined that the amount of

$200,000 will probably not make a significant contribution to the body of knowledge on this subject, and that a more comprehensive study could cost much more. In view of the variety of uses for which irradiation is already approved, with other uses under development, the agency is presently considering whether further studies at this time would be a wise use of funds.

New Drug Application Evaluation

QUESTION: Dr. Young, you noted that FDA's time to review and evaluate applications still substantially exceeds the 180 days established by Congress. It's my understanding that the average review time is about two years. Why do we still have a statutory requirement that this be done in 180 days? Isn't that requirement very unrealistic given what we're able to provide you in the way of resources to do that job?

ANSWER: There has been no previous congressional or administrative interest in revising the requirement. Although it appears unrealistic, the agency believes that it serves as a goal. The agency has made significant efforts to improve the review process, has reprogrammed resources toward new drug review, and has requested additional resources, as we are in our 1989 budget request. Even though we may not be close to the statutory time frame set many years ago, FDA is committed to reducing the review time for new products in any way possible.

QUESTION: Do we here in Congress just look the other way in the face of the difference between the statutory requirement for this process and what is realistically possible? and should we alter the requirement to bring it more into line with what is realistically possible?

ANSWER: Altering the requirement would only change the statutory goal but not the importance of reviewing new products as expeditiously as possible. A goal to strive toward a reduction in the time taken to review and evaluate applications, however, should remain. That goal might be more than 180 days, which was established many years ago, but what is reasonable is probably difficult to determine and would vary by the degree of complexity of each product.

Flaxseed Oil

QUESTION: Dr. Young - earlier this year, I contacted Hugh Cannon, the FDA's Associate Commissioner for Legislative Affairs, regarding the problems one of my constituents was having importing flax seed oil into the United States. Mr. Cannon, in his reply, stated that flax oil was not contained on a list of foods "generally regarded as safe." I am interested to know the scientific basis for not approving flax oil as a safe food.

ANSWER: There are a number of reasons why the Agency has not approved flaxseed oil (also known as linseed oil) as a safe food ingredient. The primary reason is that we do not have adequate data to assess the safety of flaxseed oil, and there is some basis to question its safety. Flaxseed oil has a high rate of autoxidation and thermal ploymerization when subjected to elevated temperatures. It is known that the autoxidized oil is toxic when ingested by animals. Information supporting the safety of flaxseed oil should be submitted to the Agency in the form of a GRAS affirmation petition, which is a petition seeking FDA's affirmation that a food substance is generally recognized as safe.

Moreover, there are questions about the fitness of flaxseed oil for use in food. Flaxseed oil is highly unstable. It rapidly develops an objectionable flavor because of its sensitivity to light, air and heat. Its shelf life is short compared to other vegetable oils. The stability problem of flaxseed oil results from its high content of unsaturated fatty acids - oleic, linoliec and linolenic, in particular. The latter fatty acid, having the highest amount of unsaturation, accounts for up to 60 percent of the fatty acids.

QUESTION: Under the Federal Food, Drug and Cosmetic Act, does the FDA have the authority to add flax oil to the list of foods generally regarded as safe?

ANSWER: Yes, FDA has that authority, although it is doubtful that this authority should be used to add flaxseed oil to the GRAS list. FDA will consider adding a substance to the GRAS list in response to a petition meeting the requirements under 21 CFR 170.35 Affirmation of generally recognized as safe status. The substance must meet the GRAS eligibility criteria in 21 CFR 170.30 Eligibility for classification as generally recognized as safe (GRAS). In brief, the GRAS eligibility criteria are such that general recognition of safety must be based on the views of experts qualified by scientific training and experience to evaluate the safety of substances added to food. However, no one has petitioned the Agency to affirm the GRAS status of flax seed oil.

Pertussis Vaccine

QUESTION: Many parents are concerned over reports that the current DPT vaccine may be associated with adverse reactions which in some cases have proven serious and even fatal. What is the Food and Drug Administration doing to encourage the development of alternative vaccines such as the acellular pertussis vaccine which has been so successful in Japan?

ANSWER: The clinical reactogenicity of pertussis vaccines has long been a matter of special concern to FDA. Active ongoing research in FDA's Laboratory of Pertussis has resulted in the isolation and characterization of several virulence factors that are now being considered as candidates for inclusion in new acellular vaccines. In addition, FDA has sponsored and/or organized several international symposia and workshops relating to pertussis vaccine development. Several of these have addressed acellular vaccines specifically. A recent workshop sponsored by FDA, NIH, and CDC, was devoted to a review of the status of an ongoing field trial being conducted in Sweden to evaluate the efficacy of acellular vaccine products. This study has yielded information which suggests that some degree of protection can be associated with at least two of these vaccines. However, serologic correlates of immunity have not yet been demonstrated. FDA scientists are continuing to participate in the evaluation of these clinical trials and sera from these trials is becoming available for evaluation by FDA. This analysis is expected to help in establishing the safety and efficacy of acellular vaccines.

QUESTION: Is there anything further that the agency can do, either working with industry or otherwise, to hasten the eventual introduction of this new vaccine to the American market?

ANSWER: FDA continues to serve in a leadership capacity in the research to develop an improved pertussis vaccine and the agency is making every effort to communicate new knowledge to manufacturers to assist in their development of new vaccines. FDA laboratories have provided training, reagents, methodology, and consultation to vaccine manufacturers and scientists engaged in vaccine research, development, and testing. In addition, the agency continues to work closely with CDC and NIH in efforts designed to hasten the availability of new vaccines.

SUBCOMMITTEE RECESS

Senator BURDICK. This ends today's hearing. Our next hearings will be held next Tuesday, Wednesday, and Thursday in this same room beginning at 9:30 a.m. We will hear from the public witnesses. Until then, the subcommittee stands in recess.

Dr. YOUNG. Thank you.

[Whereupon, at 11:25 a.m., Thursday, April 21, the subcommittee was recessed, to reconvene at 9:30 a.m., April 26.]

MATERIAL SUBMITTED BY AGENCIES NOT APPEARING FOR FORMAL HEARINGS

[CLERK'S NOTE: The following agencies of the Department of Agriculture did not appear before the subcommittee this year. Chairman Burdick requested these agencies to submit testimony in support of their fiscal year 1989 budget request. Those statements follow:]

DEPARTMENT OF AGRICULTURE

AGRICULTURAL COOPERATIVE SERVICE

STATEMENT OF RANDALL E. TORGERSON, ADMINISTRATOR

I appreciate the opportunity of appearing before you to present the budget of Agricultural Cooperative Service. First, I want to introduce my associates who are with me today -- Dr. Jack Armstrong, Deputy Administrator, Agricultural Cooperative Service and William S. Wallace, Director, Budget and Accounting Division, Animal and Plant Health Inspection Service.

Agricultural Cooperative Service serves as the Department's focal point in providing research, analysis, technical assistance and education to farmer-owned cooperatives throughout the United States. ACS is the independent Agency to which the Secretary of Agriculture delegated the responsibilities of carrying out the functions directed by Congress in the Cooperative Marketing Act of 1926.

Agency Missions

Agricultural Cooperative Service (ACS) helps farmers better manage the cooperatives they own and control and assists groups of farmers, fishermen, forest owners, and rural craft producers to organize new cooperatives. ACS provides a program of cooperative research, technical assistance, and education to bring about more efficient and effective cooperative operations in support of family farm agriculture and rural communities. The Agency also serves as the focal point for the collection and dissemination of statistics on farmer cooperatives and analysis of policy issues affecting cooperatives for the Department.

Importance of Farmer Cooperatives

Agricultural marketing and purchasing cooperatives are a substantial business extension of the nation's farm production enterprises. A majority of farmers have membership in or patronize cooperatives, using them to buy about 26 percent of their major farm supplies and to market about 28 percent of their products. In general, level of farmers' use of cooperatives increases as size of farm increases. In 1986, nearly 463,000 or 78 percent of commercial farmers (annual gross sales of $40,000 and over) were either members or users of a cooperative. Forty-nine and 71 percent of commercial farmers used a cooperative for marketing and purchasing farm supplies, respectively.

Some 5,400 cooperatives in 1986 had combined memberships of 4.4 million members and business volume of $58.4 billion. They produced an annual average of nearly $800 million in added income during the past 5 years. Net worth of farmers' investments in these cooperatives in 1986 totaled $11.8 billion.

Agency Research and Technical Assistance Activities

Agricultural Cooperative Service reported research in a number of areas last year to help cooperatives better adjust to changing industry conditions. For example, studies were completed on the role of cooperatives in the apple industry; the volume of exports by cooperatives; cooperative joint ventures; the efficiency of dairy producers and cooperative membership; structural changes among regional cooperatives; and financial profiles of grain cooperatives. ACS was involved in 66 formal technical assistance projects in 1987. These involved 92 cooperatives and producer groups. Thirty eight projects involved emerging and developing cooperatives and producer groups representing more than 5,000 members. Fifty-four projects involved established cooperatives. A number of these involved merger studies, cost analysis, marketing operations, and marketing alternatives to traditional row crops.

The Agency plays an important role in providing education on cooperatives to both domestic clientele and foreign visitors. ACS educational publications are widely used, and our monthly magazine is viewed as a primary source of information for improving cooperative operations. We conduct director and manager workshops for emerging cooperatives, and hosted 157 foreign visitors in 1987, briefing them on Department functions and policies, as well as various aspects of U.S. farmer cooperatives.

A study "Positioning Farmer Cooperatives for the Future" was presented to Congress on October 1, 1987. It had been requested by the Senate Agricultural Appropriations Subcommittee in its FY 1987 budget language. Specifically, it requested the Agency to ". . .conduct a study on what cooperatives need to do to remain viable businesses and increase returns to producer members. Emphasis should be on principles, practices, philosophy, and systems that strategically position cooperatives as effective instruments for their members."

This study was conducted with broad input from cooperative managers and directors, leading academicians, State cooperative council executives, and representatives from farm and trade organizations. The study covered all aspects of cooperatives, including organization, membership control, financing and performance. The report has received excellent reviews by the cooperative community and is being actively used by some in their repositioning efforts. It should provide an excellent blueprint for future work by Agricultural Cooperative Service, as well as cooperative leadership for several years to come.

In response to the President's recent budget summit agreement, and to control the deficit, the budget for the Agricultural Cooperative Service for FY 1988 is $2,303,000, which is half the Agency's FY 1988 level. To conduct our Agency's activities during FY 1989, we will have a staff ceiling of 45. Our FY 1989 budget proposes the following changes:

An increase of $45,000 for FY 1989 pay costs.

A decrease of $2,303,000 in ACS programs.

To meet this goal and continue to serve farmer cooperatives, research funds will be used only for projects having the highest national priority and having high benefit and applicability to agricultural cooperatives as a whole. In addition, the Agency will close one-person field offices in Hilo, Hawaii; London, Kentucky; and Greenville, North Carolina. We will provide services to these areas from our Washington, D.C. office. We will also discontinue cooperative research agreements at colleges and universities.

Mr. Chairman, I thank you for the opportunity to present this statement. We will be glad to respond to any questions.

ECONOMIC RESEARCH SERVICE

STATEMENT OF JOHN E. LEE, JR., ADMINISTRATOR

Mr. Chairman and members of the committee, I am pleased to appear before you again to present our proposed budget for FY 1989. My name is John Lee, and I have been the administrator of USDA's Economic Research Service since 1981, and a career employee of ERS since 1962.

The ERS Budget in Real Terms

The ERS budget proposal for FY 1989, while higher (at least nominally) than FY 1988, is in real terms 30 percent lower than our historically highest level, which was in FY 1967. Yet we are producing more now than we did then, through a combination of increased efficiency (through automation and improved management) and recruitment of a highly trained staff.

In 1967, we had nearly 1,200 employees. Today we have 840; and we are proposing a FY 1989 budget to support 860. Our output last year (in FY 1987) was more than double what it was in 1967 in two major categories--staff analyses (2,564 in FY 1987) and responses to public inquiries (64,347 in FY 1987). Through automation of data bases and word processing, improved management, and recruitment of a highly trained staff, we have been able to meet the increasing demands for staff analysis and responses to public inquiries while maintaining our research and outlook programs at relatively constant levels--and with 30 percent fewer staff (and 30 percent fewer dollars, in real terms).

In order to maintain (with fewer resources) the productivity of the base program, we redirect our work as priorities change and as soon as the investment in current projects has yielded results. For example, since I became administrator of ERS in 1981, we have terminated over 300 projects and redirected over 40 percent of the staff to new priorities.

Changes from the FY 1988 Budget

Our FY 1989 budget proposal contains a total increase over FY 1988 of $1,585,000 (a 3-percent increase) and 20 staff-years (a 2-percent increase). The total is comprised of three components.

First, we are asking for $715,000 to cover the 2-percent pay raise that took effect in January 1988.

Second, we are asking for an increase of $435,000 and 10 staff-years for a new program that was mandated by Congress: to estimate the demand for seasonal agricultural workers.

Agricultural Labor/Immigration Reform Analysis

The Immigration and Reform and Control Act directed USDA to make annual estimates of the demand for seasonal agricultural workers, beginning in FY 1989. These estimates, in combination with the Department of Labor's estimates of the supply of domestic workers available to do seasonal agricultural work, will provide the basis for allowing legal entry of foreign nationals to work in the U.S. agricultural sector under the Special Agricultural Worker Program.

In preparation for this mandated responsibility, we have redirected resources to develop (in conjunction with USDA's National Agricultural Statistics Service) the details of the data requirements and estimation methodology. We are testing the data collection procedures and estimation methodology on a pilot basis this year.

Funding this mandated program will enable us to restore critical work on the employment impacts of the industrial transformation of rural economies; work that has been postponed to free up the resources to do the preparatory work in FY 1987 and 1988 for the mandated immigration reform program that is to begin in FY 1989.

Third, we are asking for an increase of $435,000 and 10 staff-years to expand what is currently a small and embryonic effort to assess the implications of new technology (such as biotechnology) for U.S. agriculture.

Expanded Analysis of the Effects of New Technology

The United States enjoys a significant comparative advantage in producing and exporting many farm products, based on sustained public investment in science and technology. Similar investments abroad and the transfer of U.S. technology to foreign countries are rapidly changing the structure of world agriculture and altering economic efficiencies across countries.

New technologies could swamp the good intentions of existing commodity and other farm programs. The transformation of biotechnology, for example, from a laboratory curiosity to applied practices is occurring so rapidly that its implications for the productivity, structure, and competitiveness of U.S. agriculture are not being adequately assessed. Genetic engineering, combined with other recent advances (such as electronic information and marketing systems, development of livestock growth hormones, and new plant breeding possibilities), has the potential to change the U.S. agricultural system and its place in the world market dramatically.

We think that you, the Congress, and other public policymakers need a comprehensive assessment and a program of continual monitoring of the effects of new technologies so that public policies will enable U.S. agriculture to best exploit their benefits and curtail their drawbacks.

Conclusion

In conclusion, Mr. Chairman, I want to reiterate that, even with these modest increases, our program remains smaller in real terms than it was some years ago. These small increases will enable us to maintain our basic programs and undertake two new efforts in areas that we think merit modest public expenditures on research and analysis. These expenditures will have a tremendous potential payoff in terms of better information for informed policymaking.

Thank you. I will be happy to respond to your questions.

OFFICE OF THE GENERAL COUNSEL

STATEMENT OF CHRISTOPHER HICKS, GENERAL COUNSEL

Mr. Chairman and members of the Subcommittee, I appreciate the opportunity to appear this morning to discuss with you the appropriation request for the Office of the General Counsel of the United States Department of Agriculture for fiscal year 1989.

FUNCTION AND ORGANIZATION

The Office of the General Counsel serves as legal counsel for the Secretary of Agriculture and provides all legal services for the programs, operations and activities of the Department of Agriculture. These services include:

- -- rendering legal opinions;
- -- preparing or reviewing rules and regulations;
- -- drafting and reviewing proposed legislation;
- -- preparing or interpreting contracts, mortgages, leases, deeds and other documents;
- -- preparing briefs and representing the Department in judicial proceedings and litigation;
- -- representing departmental agencies in non-litigation debt collection programs;
- -- processing applications for patents for inventions by the Department's employees;
- -- representing departmental agencies in state water rights adjudications;
- -- considering and determining claims by and against the United States arising out of the Department's activities;

- -- representing the Department in formal and informal administrative proceedings;
- -- assisting the Department of Justice (DOJ) in the preparation and trial of cases involving the Department;
- -- representing the Secretary of Agriculture and the Commodity Credit Corporation before the Interstate Commerce Commission, the Federal Maritime Commission, and the International Trade Commission;
- -- providing legal advice on EEO, personnel, freedom of information and privacy act matters.

Our work is performed in Washington, D.C., and in 22 field offices across the country. Presently, about 53 percent of our authorized personnel are located in the field.

FY 1989 BUDGET REQUEST

We have requested $23,064,000 in direct appropriations for fiscal year 1989. This request represents an increase of $4,330,000 over the fiscal year 1988 level of funds available. Of the requested increase, $360,000 is for the annualization of pay and retirement costs that became effective just recently. The remaining increase of $3,970,000 is for office automation.

NEED FOR THE INCREASE

Unlike most USDA agencies, most General Counsels' offices in other departments and most divisions of the

Department of Justice, the Office of the General Counsel does not presently have a comprehensive office-wide automation system. The office does have stand-alone IBM Displaywriters as its primary word processing equipment. While these machines are an improvement over typewriters, they do not provide any meaningful automation capability in areas other than simple preparation of documents. More important, these machines are now obsolete. IBM has ceased manufacturing and marketing the Displaywriters, and the machines will become increasingly difficult and expensive to repair and maintain. Accordingly, OGC has no option other than to plan for an alternative to the Displaywriters. In order to plan for this unavoidable changeover, I appointed, in April of 1987, a Task Force to comprehensively study the issue and make recommendations to me. Those recommendations are incorporated into this budget request.

The system as proposed by the Task Force and included in the budget will provide faster word processing, electronic sharing of documents and records, access to computerized legal research, and telecommunications among our offices, clients and outside agencies such as the Department of Justice. We believe that increasing interchange of work product and compilation of standardized record keeping systems will result in a substantial savings in attorney time and an increased ability to justify requests for, and allocation of, resources both on the part of OGC as a whole and individual divisions and offices. By improving how the office works, productivity can be increased within the authorized staffing level.

Specifically, the recommendations of the Task Force are that OGC acquire a comprehensive office automation system of IBM PC compatible personal computers available to each employee in Washington and in the twenty-two OGC field offices. These personal computers will be linked together in Washington through the Department's existing local area network and through local area networks to be acquired for each field office. The OGC office automation system will also consist of a minicomputer, located in Washington, but accessible by all OGC employees, which would contain OGC wide records and an archive of significant OGC documents. In addition, a shared record and document storage facility (file server) will be maintained in each division or field office by using a separate and more powerful personal computer.

As mentioned above, the fiscal year 1989 budget request associated with providing OGC with a comprehensive office automation system is almost $4 million. However, two-thirds, or $2.6 million of the requested increase is a one-time, one-year cost for the purchase and installation of equipment. The remaining $1.4 million represents a permanent increase to operate and maintain the system.

The office automation system will be designed to be utilized by every employee in OGC. It will allow electronic sharing of documents and access to records among all divisions and offices in OGC, subject to appropriate limitations such as not being able to edit documents that have already been issued. It will also allow such exchanges between OGC, client agencies, Department offices and outside entities, such as the Department of Justice or individual United States Attorney's office. Further, it will allow each attorney access to computerized legal research such as WestLaw and Lexis. Presently, this is only available in the Washington, D.C. office, primarily in the Law Library. An office automation system which facilities free exchange of communications and access to shared documents will allow OGC to act as a unified national law office rather than an aggregation of separate offices.

By utilizing widely available hardware and software that, to the extent possible, have acquired "industry standard" status OGC can minimize compatibility problems and reduce the burden of the conversion process. This system will have the potential to continually evolve to meet the changing needs and requirements of OGC. Both the system as a whole and many of the individual hardware and software components can be upgraded as changing technology and availability of resources dictate.

This budget proposes to complete the entire office automation system by the end of fiscal year 1989. This will be accomplished in a staged implementation process as funds and administrative constraints allow.

WORKLOAD SITUATION

New legislation, increased litigation, increased or redirected program activities and policy changes continue to intensify our client agencies' demands for legal services. It appears that this will not change in the near future. For example, civil cases pending at the end of fiscal year 1987 were 38,872 compared to 34,131 pending at the end of fiscal year 1986.

With the help of the Committee in fiscal years 1987 and 1988 we have been able to hire a few additional employees. Our on-board strength of 335 employees a year ago has risen to about 347 currently. We hope to continue this trend in order to reach our personnel ceiling.

In closing, Mr. Chairman, we appreciate the support you and the Committee have provided to our office in the past. This concludes my statement. I will be happy to answer any questions the Committee may have.

OFFICE OF GOVERNMENTAL AND PUBLIC AFFAIRS

STATEMENT OF WILMER D. MIZELL, ASSISTANT SECRETARY

Mr. Chairman and members of the Subcommittee, I am pleased to discuss the fiscal year 1989 request for the Office of Governmental and Public Affairs.

OGPA continues to use every means possible to communicate the Department's policy and program information to Congress, the public, and State and local governments. We have modernized our printing technologies, electronic communications and increased our use of satellite delivery of information.

We are also charged with the exchange of information with the nation's Governors, State heads of agriculture, Indian Tribal Councils and the associations that represent these entities. In this role we solicit information from State and local governments to assess the impact of USDA programs and advise officials of Federal action affecting rural America.

During the last fiscal year, we organized briefings for over 8,000 people who visited the Department. We are also coordinating four regional agricultural biotechnology conferences this year in cooperation with the Land Grant Universities and State Agricultural Experiment Stations.

Last year was the Bicentennial of the signing of the Constitution. The Department was pleased to acknowledge the vital contributions of farm families to the growth and strength of this great Nation. In August we inaugurated a program to recognize farms that have been in the same family for 200 years. Each family received a certificate recognizing that the farm has been in the same family since the birth of the U.S. Constitution. The 1987 Yearbook, "Our American Land", commemorates this Bicentennial by relating how our Nation's history has been influenced by our land resources.

FISCAL YEAR 1989 BUDGET REQUEST

I am requesting a funding level of $8,919,000. This represents a net increase of $246,000, or approximately 3 percent above our fiscal year 1988 level of $8,673,000.

Specifically, we are requesting an increase of $132,000 in pay costs and $114,000 increase for expanding current programs and services to the public. The increase is needed to expand several on-going projects and implement several new ones in an effort to provide the public with more and better information about USDA programs.

We will continue to publish the Yearbook of Agriculture for distribution as in prior years.

This concludes my statement, Mr. Chairman. I will be happy to respond to any questions.

OFFICE OF THE INSPECTOR GENERAL

STATEMENT OF ROBERT W. BEULEY, INSPECTOR GENERAL

Mr. Chairman, Members of the Committee, I appreciate the opportunity to appear before you today to discuss the operations of the Office of the Inspector General and provide our view on some of the major programs and activities of the Department of Agriculture.

GENERAL COMMENTS

In Fiscal Year 1987 OIG issued 793 audit reports and 1,233 reports of investigation. These audits and investigations identified $208 million in management commitments to seek recovery of funds and management commitments to more efficiently use funds. During this same period our work resulted in 554 indictments and 551 convictions. With our good record in these areas, we believe the OIG continues to more than pay for itself.

While difficult to quantify, but as important as monetary results, the agencies have acted to implement recommendations to strengthen existing controls and effect new ones. This should preclude or reduce future occurrences of erroneous payments and provide further assurances that benefits and payments go to eligible individuals and entities.

With the available OIG resources, it is imperative these be used so that over time coverage is afforded the Department's activities, with those judged to be more vulnerable receiving priority. To this end, we have continued with our strategic planning process initiated in 1987.

OIG has developed broad strategies dealing with the Department's activities. These include such activities as entitlement programs, consumer protection, farm programs, insurance, Forest Service, loans, financial management and automated data processing systems. Beginning in Fiscal Year 1987 these strategies became the focus of our annual planning activities and will continue as such for the next few years.

OIG continues to give particular emphasis to the investigation of threats to the health and safety of the public; employee integrity issues; and fraud in loan and benefit programs. For Fiscal Year 1988 audit and investigative plans were coordinated providing the Department with broader review coverage.

I would like to discuss some of our efforts in these strategies this past Fiscal Year.

ENTITLEMENT PROGRAMS

The Department, through the Food and Nutrition Service, administers three major entitlement programs which account for approximately $17.4 billion in Fiscal Year 1988 - the Food Stamp Program, the Child Nutrition Programs, and the Supplemental Food Program for Women, Infants and Children. Our strategy focuses on the overall management role of the administering program agency, the Food and Nutrition Service, and the adequacy of controls and systems used to manage the programs as well as to continue a coordinated enforcement program with other Federal, State and local agencies.

In the Food Stamp Program, we initiated an intensified nationwide effort against fraud, code named "Project Wipeout." This effort, which is ongoing, is a coordinated investigative operation involving the Criminal Division of the Department of Justice and various U.S. Attorney's Offices, and other Federal and State law enforcement agencies throughout the United States. Our goal is to identify, investigate, and prosecute individuals defrauding the program. Investigative subjects have included retail store owners, caseworkers, recipients, and other individuals not authorized to participate in the Food Stamp Program. In addition, through successful prosecutions, administrative sanctions, and media coverage, this project is designed to deter other would-be cheaters from defrauding the program.

Thus far, the project has resulted in 357 indictments and 172 convictions for violations of the Food Stamp Act and other related criminal statutes.

For example, we conducted an audit in Illinois and Indiana using computer matching to identify participants either failing to report earned income or making claims in more than one county. This effort led to investigations and indictments against 29 individuals in the Chicago-Gary metropolitan area, including eleven Federal employees. Those indicted were charged with illegally collecting more than $500,000 in public assistance benefits by receiving food stamps in Illinois or Indiana while failing to report income earned, or collecting benefits concurrently from both States.

Another investigation, resulted in the arrest of a Food and Nutrition Service employee and 10 persons associated with retail grocery stores and the subsequent indictment of 19 additional persons on charges of bribing a Government official and/or food stamp trafficking. Due to a lack of internal controls in the field office, the Federal employee was able to improperly obtain Food and Nutrition Service retail food stamp authorizations and sell them to unauthorized retail store owners. We expanded our coverage and conducted audits at the New York City Field Office and at several other Food and Nutrition Service field office locations. Although we did not uncover any additional fraudulent schemes, we did find internal control problems, such as a lack of division of duties and computer security matters. In response to the audits conducted at the various field office locations, the agency established a task force to address the control weaknesses and vulnerable areas at field offices which resulted in the development of a corrective action guide for use in the overall management of field offices.

In addition to "Project Wipeout," we also conducted an audit of States' accounts receivable systems for food stamp claims. We estimated there were over one million accounts receivable with total unpaid balances of $375.2 million. The audit found that internal controls had not been established to effectively manage the outstanding claims, accounting systems did not always meet minimum requirements, claims against participating households were not identified and there were inadequate controls to assure the accuracy of claims information reported to the Food and Nutrition Service. Based on the audit, the agency agreed to strengthen its management and internal controls over claims accounting, collection and reporting systems.

At last year's hearings, we discussed some major cases of fraud in the Supplemental Food Program for Women, Infants and Children in the Los Angeles area. Our investigations have resulted in the conviction of 31 individuals and combined fines, recoveries and restitutions in excess of $900,000.

I also mentioned at that time that we were conducting a nationwide audit survey to identify control weaknesses in States' delivery and monitoring systems. As a result of that survey, we initiated a nationwide audit in mid-Fiscal Year 1987 which is nearing completion.

The audit is being conducted in seven States which account for approximately $312 million in program funds, or 24 percent of the total. The objectives of the audit are to evaluate controls exercised by States over food instruments from printing to issuance; controls over the authorization process for issuing food instruments; the reconciliation of redeemed food instruments to issued food instruments; and the effectiveness of vendor monitoring systems.

In the area of Child Nutrition Programs, our audits over the last several years have continued to find internal control problems over meal counts and claims. Based on these recurring problems, we made recommendations to the Food and Nutrition Service to strengthen State reviews to better appraise controls over meal counts and claims for reimbursement. In response to our recommendations, the Food and Nutrition Service formulated corrective actions to improve controls over meal counts and State review procedures by initiating "Project AccuClaim." All levels of Child Nutrition Program administration, from the Federal to local school food service personnel, are involved in a comprehensive review to tighten controls over meal counts and claims. The project will assess and make necessary changes to regulations and policies, monitoring techniques, and the form and extent of technical assistance provided.

CONSUMER PROTECTION

Another focus of our work was the domestic Meat and Poultry Inspection Program and imported meat inspections. In 1986, we evaluated the management controls of the domestic Meat and Poultry Inspection Program and made several recommendations for legislative changes to improve the effectiveness of the inspection process. We also reported that management improvements were needed in the domestic Residue Monitoring Program, in procedures used to recall harmful products, and in the label approval process. In response to our recommendations, the Food Safety and Inspection Service took positive action to strengthen controls in the inspection program. We have initiated an audit to evaluate the corrective action taken on these recommendations and to evaluate the control procedures over poultry slaughter inspection and pesticide residues.

We continue to conduct some investigative work in the domestic meat inspection programs. Some of our more recent investigations involved Federal employee corruption and economic fraud. For example, three officials of a New Jersey based meat processing firm, along with five former meat inspectors, were convicted of a bribery scheme which allowed the firm to improperly process meat products such as hotdogs, bologna, salami and liverwurst by improperly adding excessive fat, water, and a soy derivative. In other cases in Illinois, charges were brought against a former meat grader, a former meat inspector, and five other persons who were either owners or management officials of four meat plants. Charges against the individuals included the offering and accepting of bribes, gratuities, and mail fraud.

As the result of a joint investigation conducted by OIG and the Defense Criminal Investigative Service a Virginia meat processing firm, and its former and current presidents, were ordered to pay fines, restitution, and investigative costs totalling $637,000. Additionally, the two officials received reduced prison sentences after pleading guilty to violating the Federal Meat Inspection Act. The firm, which had several contracts with the Department of Defense to provide bacon to the military, has been debarred from bidding on Department of Defense contracts for 3 years.

In reviews of the imported meat inspection process, we found that management controls could be strengthened in the following areas to ensure that: product wholesomeness is equivalent to U.S. standards; all imported meat products are presented for inspection; the movement of meat products is monitored prior to inspection; standards are established for import inspection facilities; and markings of products refused entry into the United States are adequate.

In response to our audit, FSIS informed us that corrective actions have been initiated. We currently have a followup audit in process to evaluate the effectiveness of the actions taken.

EMPLOYEE INTEGRITY

In addition to the significant criminal cases brought against the Food and Nutrition Service employee, the Food Safety and Inspection Service food inspectors and the Agricultural Marketing Service meat grader, mentioned earlier, OIG worked employee misconduct cases which resulted in criminal and/or significant administrative action. A total of 163 USDA employee misconduct cases were investigated in Fiscal Year 1987.

Two additional significant employee misconduct criminal cases were worked in conjunction with the Federal Bureau of Investigation (FBI). The Farmers Home Administration State Directors in Kentucky and Hawaii were indicted by Federal grand juries as a result of joint OIG/FBI investigations. The FmHA State Directors were indicted for acceptance of bribes, among other charges. Both State Directors resigned and the former Kentucky State Director has been sentenced as a result of a plea bargain. Trial for the former Hawaii State Director is pending.

FARM PROGRAMS

Under production adjustment program provisions, total payments for feed grain, rice, upland cotton, and wheat to any one individual or entity are not to exceed $50,000 per year. A separate $50,000 limitation applies to payments under the Conservation Reserve Program. For payment limitation purposes an individual or entity is identified as an individual or legal entity that has a separate and distinct interest in the land or crop.

During this past year OIG has continued its efforts to identify payment limitation abuses and weaknesses which would require agency corrective measures.

Our audit of the $50,000 payment limitation under the production adjustment program reported improper payments in excess of the payment limitation, totaling about $15.7 million in 1981 through 1986 payments. Projecting our results to the audit universe, OIG estimated about $60 million in improper payments had been made or approved in eight states.

We conducted reviews in two States to determine if controls and procedures were in place to control payment limitations in the Conservation Reserve Program. Operating plans were not being obtained to make "person" determinations because of confusion by State and county personnel on when the plans should be obtained.

The resulting audit recommendations were accepted by the Agricultural Stabilization and Conservation Service (ASCS) and included in the Secretary's report to Congress on laws and regulations that could be changed to better ensure the fair and reasonable application of payment limitations. ASCS issued clarifying regulations on when "person" determinations must be made for the Conservation Reserve Program.

INSURANCE

OIG reviewed Federal Crop Insurance Corporation (FCIC) operations focusing on whether reinsured companies' loss adjustment activities were administered according to applicable laws and regulations and whether FCIC's controls over loss adjustment activities were adequate.

During our review of FCIC reinsurance operations, we tested 125 larger dollar indemnity claims totaling $10.2 million, adjusted by 11 reinsured companies for crop years 1984, 1985, and 1986. Excessive indemnities of $5.1 million were paid to about 69 percent of the cases tested. FCIC generally agreed with the audit recommendations and is moving to make its compliance division fully operational to review reinsured companies' loss adjustment activities.

A 1982 OIG audit disclosed major opportunities for the Forest Service to save money by reducing timber purchaser road standards. The Forest Service undertook a major effort to achieve that goal. However, a 1985 review reported that at least one Forest Service Region had not adequately implemented the abbreviated/simplified road standards the Forest Service had developed.

We are pleased to report some positive results from prior work we have performed in Forest Service Programs. A followup audit completed in 1987 determined that the Forest Service had generally corrected standards cited in our prior reports on road construction. Costs have decreased dramatically from an average cost of about $23,000 to $18,000 per mile. Forest Service estimated total cost savings in its road construction programs for Fiscal Years 1984 through 1986 to be about $64.6 million.

The Knutson-Vandenberg (K-V) Act of 1930, as amended, authorizes the Secretary of Agriculture to require purchasers of National Forest timber to make deposits to cover reforestation and timber stand improvements. These deposits are taken from timber sale receipts, and any excessive K-V funds collected are to be transferred to the National Forest Fund.

Our audit of 10 National Forests indicated that the K-V account held $26 million of excess funds that should have been transferred to the National Forest Fund. Based on our recommendation, the Forest Service reviewed the K-V fund balance for all National Forests and determined that the amount that should be transferred was $81 million. The Chief emphasized to the Regions the need for annual reviews of K-V fund balances. The Forest Service also agreed to strengthen procedures for reviewing sale area improvement plans and making necessary adjustments in K-V collections.

LOANS

The Rural Rental Housing Program, operated by the Farmers Home Administration (FmHA), is authorized by Congress to provide low cost rental housing for low to moderate income households and senior citizens in rural areas. Loans are repayable in not more than 50 years.

In addition to the loans, provisions are made for interest reductions to the borrower so that low income tenants may pay rental fees within their means. Low income tenants can also be supplemented through a rental assistance program administered by FmHA.

As a result of OIG's investigative efforts in the Rural Rental Housing Program, FmHA has revised and modified its rules and regulations. It has also become more aware of the possibility of fraud in the program. In the past year there have been nine individuals indicted for defrauding the program. These indictments have resulted in seven convictions, with fines and restitution totaling $72,866. Additional restitution is still being negotiated.

In Michigan, a borrower allegedly received kickbacks of $290,000 from the construction company for projects financed through FmHA and the Department of Housing and Urban Development. The construction company owner and an employee have pled guilty to conspiracy charges and the borrower is facing trial.

In Fiscal Year 1988, OIG plans to continue audit efforts in the Rural Rental Housing Program. We have scheduled reviews of eligibility of Rural Rental Housing projects for Rental

Assistance payments; accountability over reserves and operating funds for rental projects; and the automated Rural Rental Housing accounting system.

We also conducted audits in five States to identify Federal employees with FmHA loans. Using computer matching techniques, we identified 294 Federal employees with 622 FmHA loans who were delinquent and possibly subject to salary offset. We identified about $9.8 million in outstanding loans to 502 Federal employees, that should have graduated to commercial lending sources. FmHA reviewed these loans and determined that $4.4 million could be graduated. These borrowers requested and subsequently obtained credit from commercial sources and paid off the FmHA loans.

CASH MANAGEMENT

In February 1985, FmHA implemented an electronic funds transfer system to speed loan closures by getting funds to the field offices more expeditiously. Our review of the loan disbursement activities disclosed that for a 6-month period in 1985, FmHA made about 45,000 electronic funds transfers totaling about $1.5 billion. However, we noted that $729 million of this total was held in local financial institutions for more than 10 days prior to loan fund disbursements.

In April 1985, FmHA decentralized its loan deposit system to eliminate mail float to the agency's central Finance Office and thus speed deposits into the Federal reserve. Our review of FmHA's cash collection activities disclosed that for a 6-month period in 1985 about $666 million of the $1.4 billion collected by FmHA field offices was not deposited within 1 day of receipt. We estimate that as a result of the premature loan requests and the delays in deposits, FmHA incurred unnecessary interest expense of as much as $7.1 million in 1985. FmHA agreed with our recommendation that it develop and implement automated systems to monitor cash collection activities.

Our review of FmHA's interest rate charges for Limited Resource Farm Ownership loans disclosed that corrective action for the 210 loan accounts identified in our prior audit was improper or not done. In the current review, 41 additional cases were identified as having incorrect interest rates. Consequently, interest rates continued to be incorrect on the 251 loans with unpaid principal totaling $18 million. Since our prior audit, FmHA has undercharged interest totaling about $563,000, and unless corrected, FmHA will continue to undercharge interest totaling about $355,000 annually.

FmHA's written response showed that corrective action was being initiated to correct the improper interest rates and to prevent their recurrence.

We identified 341 potential duplication payments of $1.1 million processed by the National Finance Center Purchase Order, Over-the-Counter Purchase, and Miscellaneous Payment Systems. These potential duplicates were identified through analyses of the payments processed by these systems for the 4-month period August to November 1985 and analyses of the National Finance Center November 1985 returned Treasury check file. A sample of 75 of the larger potential duplicate payments disclosed 40 instances amounting to about $630,000 where duplicate payments were made. The National Finance Center and user agency personnel were unaware of some of these overpayments until our audit review or until the vendor returned the excess payment. We recommended that the National Finance Center perform automated matches of payment data and collect all overpayments. Further recommendations were made to the National Finance Center to ascertain if additional edits can be established to prevent duplicate payments.

COMPUTER SECURITY

We reviewed the security and management controls at the Office of Information Resources Management Departmental Computer Centers in Kansas City, Washington, D.C., Fort Collins, and at the National Finance Center in New Orleans. We found that the policies and guidelines provided in Departmental Regulations were not always properly interpreted and followed by the centers. In some instances, additional and enhanced guidelines and procedures are necessary to more fully describe and outline the computer security levels needed and expected within USDA. Security and control weaknesses at four computer facilities resulted in varying degrees of vulnerabilities to unauthorized system and data access. Vulnerabilities were amplified by the computer facilities not generating the type of logging reports for the users to determine who was accessing or attempting to access their datasets. At some locations, the number of identifications and individuals with special access powers were not limited to the number necessary to perform job duties. The audit recommended better internal controls and the development of specific guidelines to secure Departmental data.

To fulfill telecommunications needs, the Department has contracted to use public data network telephone lines, dish transmitters, receivers, and satellites. The service is used primarily for electronic mail and electronic data transfer. Because the systems are available to other users, the Department maintains security over its programs through access codes.

Computer security is an area of continuing concern for the Department and OIG. During our examination of data transmission records for June 1987, we found 61 ASCS county offices in 24 States with access codes which were charged for calls, but which were not used to connect to other Departmental computer facilities. We reviewed in detail six access codes used for direct access and concluded that the codes were probably used by "hackers." The cost for the month to the Government for abuse of the network was more than $6,000 for the six codes.

We recommended immediate action to cancel the compromised codes and that procedures be established for timely identification and cancellation of compromised codes. In addition, we recommended that the agency and contractor involved reduce vulnerability to unauthorized use of the data transmission network and provide for timely identification of questionable activities.

FY 1989 BUDGET REQUEST

The Fiscal Year 1989 budget request for the Office of Inspector General is $51.4 million. Although this reflects an increase of $2.6 million, the increase is only to provide funds to restore staffing to our Fiscal Year 1987 level and fund the Fiscal Year 1988 pay cost increase.

This concludes my statement Mr. Chairman. I will be glad to respond to questions from the Committee.

NATIONAL AGRICULTURAL LIBRARY

STATEMENT OF JOSEPH H. HOWARD, DIRECTOR

Mr. Chairman and members of the Subcommittee. It is an honor to appear before you today to discuss the proposed fiscal year 1989 budget for the National Agricultural Library (NAL). I would like to introduce Mr. Sam Waters, the Associate Director for NAL.

The National Agricultural Library is one of three national libraries. NAL serves as the national resource for the collection and dissemination of information on all aspects of agriculture. NAL fulfills national and international responsibilities as the ultimate resource for access to worldwide agricultural information, published in any format, while giving special attention to serving the information needs of the Department of Agriculture.

NAL works closely with a national network of Land-Grant University libraries, state supported colleges and universities with agriculturally related programs, other public organizations, industry, and private sector organizations. These groups join together to supply agricultural information to all sectors of the population. At the same time, NAL has worked diligently to take a leadership role in U.S. participation in national and international agricultural library and information systems and in efforts to promote world-wide availability of agricultural information.

Cooperative efforts between NAL and the land-grant libraries have made possible improved coverage of state agricultural publications. Through these efforts, the libraries collect, process and provide document delivery for state experiment station and extension service publications. This process has also involved state libraries and other university libraries having archival responsibility for state agricultural publications.

To extend NAL's capabilities and improve its responsiveness, we are moving to the leading edge of new technology in information science. Laser technology, with its capability for storing vast amounts of information in a small space, has the potential to significantly change the means by which publications are distributed and used. With the proper retrieval system, every word, phrase and illustration becomes immediately accessible. Using this technology, NAL has pioneered projects on compact disks for storage and retrieval of bibliographic data, and the full text of publications, as well as interactive video disks for training and for the storage of photographs. Many of these projects specifically improve services to individuals through faster responsiveness and more complete coverage, while also serving as a means for preservation of the text and images.

Dissemination of the full text of agricultural publications on compact laser disks is being investigated through a national cooperative project including NAL and the land-grant libraries to test this technology. Using a system which digitizes the page image and then converts the text on the page to computer-coded form, users may search the text of documents by any word or combination of words, and then view a copy of the original. Equipment has already been installed at NAL, publications to be included have been selected, and testing is now underway. Additional projects using advanced information technology involve the development of expert systems for answering factual inquiries, and the use of telecommunications to deliver copies of library materials.

To ensure that technology is applied for the improvement of information services, the Library has created a number of small information centers focused on issues of high importance in the field of agriculture. Among these are centers covering aquaculture, agricultural trade, and biotechnology. In 1987, NAL expanded its information center concept by initiating a Rural Information Center under a joint project with the Extension Service. NAL's staff in this Center will respond to inquiries on topics affecting rural America. Information and referral services will be offered to local government officials making use of Extension's network of county and state offices.

Other achievements in 1987 were:

- o Establishing a Technology Demonstration Center in the main lobby of the NAL Building in Beltsville to demonstrate several systems that use new computer technology for the management, retrieval, dissemination, and preservation of agricultural information.
- o Establishing a Special Collections Reading Room in the NAL to dramatize the unique collection of agriculture related research

materials, and to furnish an inviting and stimulating environment in which to work and study.

We at NAL are especially proud of our success in the development of cooperative ventures that multiply the impact of our contribution and the effects of the outcome. The project mentioned earlier for computerizing the full text of agricultural publications is a case in point. Forty one land-grant libraries have entered into a cooperative project with NAL to test new methods of capturing full text and images in digital format for distribution through media such as CD-ROM (Compact Disk - Read Only Memory) which is the computer-use version of the digital audiodisks, now utilized for music records. Purpose of CD-ROM laser disks as a storage and dissemination medium allows for rapid local access without telecommunication charges and permits sophisticated searching of the full text. The database is retained in a standard format that offers the potential to be utilized many other ways in the future, including preservation in a medium more stable than paper.

Another example of a successful cooperative project was the development by NAL of a laser disk containing 35,000 photographs from the Forest Service historical collection, instantly searchable by microcomputer. This has led to a similar project for storing and retrieving photographs held by other Agencies within USDA.

We propose a budget for FY 1989 of $13,599,000, which includes a program increase of $450,000 for a Technology Transfer Information Center; $450,000 for the Rural Information Center; $200,000 for the Federal/Land-Grant Network System; $124,000 to annualize the FY 1988 pay costs and $181,000 to provide for general increased operating expenses for library materials, data base services, and equipment.

The increase for a Technology Transfer Information Center will allow NAL to establish a structured Center to facilitate technology transfer in important fields to those businesses and individuals who need such data. Working with the Agricultural Research Service, NAL and the Extension Service jointly will develop and implement an integrated information dissemination system to expedite technology transfer.

As I noted previously in my statement, the Rural Information Center was initiated on a limited basis in FY 1987 to improve information service to rural America. In FY 1989, NAL in conjunction with the Extension Service proposes to expand its' support for this Center as part of the Secretary's Rural Revitilization Initiative. This will provide a link between user groups, or individuals with specific needs, and the information resources to which we have access including those located outside NAL.

Funds proposed for the Federal/Land-Grant Network System in FY 1989, building on cooperative projects like those mentioned above, are meant to develop and implement a coordinated plan to serve as a framework for the identification and continuing coordination of specific cooperative projects having a bilateral and multi-lateral impact. NAL will contribute the infrastructure for coordination of the network, and support for network meetings, using funds requested to strengthen cooperative development of network services and the specialized collections on which they are based. Cooperative programs in research and development of useful information technologies will especially be encouraged.

The increase for general increased operating expenses is essential to assist NAL with extraordinary increases in the cost of publications essential to our users. In addition, as advanced technology in information sciences is implemented, NAL is experiencing an increase in related costs for equipment and data base usage.

Mr. Chairman, I and my colleagues will be happy to answer any questions that you might have.

NATIONAL AGRICULTURAL STATISTICS SERVICE

STATEMENT OF CHARLES E. CAUDILL, ADMINISTRATOR

Mr. Chairman and members of the Committee, it is an honor to appear before this distinguished Committee to present the National Agricultural Statistics Service's (NASS) FY 1989 budget request. The Committee's continued recognition of the need for a strong agricultural statistics program and your support are appreciated. This year (1988) marks the 125th anniversary of this program in the Department of Agriculture which points out the long-standing importance of statistical information on agriculture for decision-making purposes.

The NASS administers the USDA's program of collecting, compiling, and disseminating current national and State agricultural statistics. Research designed to improve the statistical methods and techniques used to produce agricultural statistics is also conducted. In addition, NASS performs reimbursable survey work for other Federal, State, and producer organizations.

Statistical data developed by NASS on the Nation's agriculture are essential for the orderly development of production and marketing decisions by farmers, ranchers, and other agribusinesses. These agricultural data series are also used for monitoring the everchanging agricultural sector and for making and carrying out agricultural policy relating to farm program legislation, commodity programs, agricultural research, rural development, and related activities.

Fiscal Year 1989 Budget Request

The fiscal year 1989 budget request is $64,086,000. This request includes an increase of $1,200,000 for collecting seasonal agricultural labor data, as mandated by the Immigration and Control Reform Act of 1986, $995,000 for increased operating costs, and $715,000 to cover unfunded additional pay costs.

Major Activities of the National Agricultural Statistics Service (NASS)

The primary activities of NASS are the collection, summarization, and analyses of data and publication of accurate and reliable agricultural forecasts and estimates. Thousands of farmers, ranchers, agribusinesses, and others voluntarily respond to nationwide surveys about crops, livestock, and other agricultural activities. These surveys are supplemented by field observations, objective yield counts and measurements, and other administrative data to provide reliable information. Annually, estimates for about 120 crops and 45 livestock items are published in about 300 reports prepared by NASS's Agricultural Statistics Board (ASB).

The agricultural production and marketing data that are developed and published by NASS include: number of farms and land in farms; acreage, yield, and production of grains, hay, oilseeds, cotton, tobacco, fruits, vegetables, floriculture, and specialty crops; stocks of grains; inventories and production of hogs, cattle, sheep and wool, goats, catfish, trout, poultry, eggs, and dairy products; prices received by farmers; prices paid by farmers for inputs and services; cold storage supplies; and other data related to the agricultural economy.

The NASS agricultural statistics program is conducted through 44 State Statistical Offices (SSO's) servicing all 50 States. These SSO's are operated under cooperative funding arrangements with State Departments of Agriculture and/or Land-Grant universities. This arrangement efficiently serves the agricultural data needs at both the State and Federal levels and eliminates duplication of effort. Twenty of the NASS State offices are physically located in State office buildings. These beneficial colocations provide increased service and additional agricultural data for State and local needs while minimizing overall costs to the Federal Government.

A research program is conducted to improve the statistical methods and techniques used in developing agricultural statistics. This research is directed towards improved sampling, yield forecasting, and survey techniques. A remote sensing research program is continuing with the objective of increasing the accuracy of both domestic and foreign crop acreage and land cover estimates.

The NASS also conducts surveys on a reimbursable basis for other Federal, State, and private agencies or organizations. Our existing survey capability can provide these services much more efficiently than having each agency conduct its own surveys. In addition, technical assistance in the development of agricultural statistics programs in foreign nations is also conducted on a reimbursable basis.

The NASS periodically seeks input on data needs and priorities from data users through individual contacts, meetings with commodity groups, ASB briefings, other Departmental and Federal agencies, and regional data user meetings. The most recent series was completed earlier this month. The Agency has made many adjustments in its program in response to suggestions made by data users indicating that new data series or changes in current series are needed. Users support the policy that statistical efforts should continue to place emphasis on data quality over quantity, and we attempt to balance the attributes as we make program adjustments. However, requests continue for expanded detail, wider geographic coverage, more frequent reports, new data series, and restoration of data series discontinued because of budget restrictions.

Fiscal Year 1989 Plans

An increase of $1,200,000 is requested to collect seasonal agricultural labor data. This increase would allow the Department to meet the requirements of the Immigration Reform and Control Act of 1986. The law requires that the Departments of Agriculture and Labor jointly estimate the agricultural labor needs and supplies for the determination of the number of replenishment alien workers to be admitted to the United States to offset any shortages. Estimates are to be made annually beginning on October 1, 1989. Statistically valid estimates of the number of man-days of labor used for agricultural production of perishable commodities will be provided through a nationwide probability sample design. Farmers and ranchers will be contacted several times during the year to provide this information.

The budget request includes $995,000 for increased operating costs. These resources are needed to maintain the core program because of increased costs incurred for travel, printing, communication services, supplies, equipment, machine maintenance, staff transfers, and data processing services.

An increase of $715,000 is requested to cover increased pay costs that became effective in January 1988 and for which funding has not been provided. This expenditure cannot continue to be absorbed without affecting critical parts of the base crop and livestock estimating program. Budget restraints have already resulted in a reduction of 18 percent of the NASS work force since 1980, reducing the scope of the overall estimating program.

This concludes my statement, Mr. Chairman, and I will be happy to respond to your questions.

PACKERS AND STOCKYARDS ADMINISTRATION

STATEMENT OF B.H. (BILL) JONES, ADMINISTRATOR

I appreciate the opportunity to appear before the Subcommittee to discuss the programs of the Packers and Stockyards Administration (P&SA) and the Agency's budget request for fiscal year 1989. First, let me introduce my associate, Calvin W. Watkins, who is responsible for the Agency's budget work.

You are familiar with the traditional programs of the Agency. As you are aware, the Packers and Stockyards Administration is primarily an investigative and law enforcement agency and is charged with maintaining economic law and order in the marketing of livestock, meat and poultry and in the marketplace.

The responsibility of the Agency has expanded somewhat recently. The clear title provisions contained in Section 1324 of the Food Security Act of 1985 were delegated to the Agency by the Secretary. Also, the Packers and Stockyards Act was amended by the "Poultry Producers Financial Protection Act of 1987," which provided for prompt payment and a statutory trust similar to that adopted by the Congress in 1976 for livestock producers. The poultry amendments removed the Agency's jurisdiction over the marketing of poultry products but left intact its jurisdiction in the marketing of live poultry.

POULTRY AMENDMENTS

The poultry amendments to the Act became effective February 23. The appropriate changes have been made in the printed Act, and regulations are being developed to implement the new statutory provisions.

As stated, the amendments removed the Agency's jurisdiction over the marketing of poultry products. This comes at a time when a merging of the red meat and poultry industries is taking place, particularly in the processing and distribution segments. The transfer of ownership and control of red meat and poultry firms has resulted in the firms themselves becoming participants in the same competitive arena, in addition to the traditional product competition at the wholesale and retail levels and in the HRI (hotel/restaurant/institutional) trade. Also, several of the largest hog farrowing and production operations in the Nation are tied directly to large poultry firms.

CLEAR TITLE

This is the second year for the Agency to report its clear title activities.

As of March 1, 1988, the central filing systems of 16 states had been certified as meeting the requirements of the 1985 Act, and there were no applications pending. During the course of this past year, several states have submitted changes requiring modification of their systems.

The Agency continues to act promptly in conducting its certification reviews. The time necessary for these reviews has averaged 40 days and has varied from 3 weeks to 3 months, depending upon the manner in which the material was organized and the extent to which the proposed system met the requirements of the Federal statute.

PROGRAMS UNDER THE P&S ACT

Livestock, meat and poultry production and marketing are continuing to undergo significant change. Fortunately, the P&S Act was written in such a manner as to allow for program modification to meet the needs of a changing industry.

Programs under the P&S Act include assuring payment to producers, fostering fair and open competition, and guarding against unfair, deceptive and other fraudulent practices in the marketing of meat animals and the products therefrom.

Financial problems have continued to plague firms engaged in livestock, poultry and meat marketing. Consequently, it is particularly important to the stability of the farm economy for livestock and poultry producers to receive full payment when due.

These conditions have again forced the Agency to give special priority and to allocate additional resources to the financial area. During fiscal year 1987, 10 auction markets failed financially leaving $990,000 unpaid for livestock. Also, 21 dealers/order buyers failed financially leaving $3.2 million unpaid for livestock.

The Subcommittee will be particularly interested in developments in the meat packing industry. During fiscal year 1987, 21 meat packers failed financially. This number and the number during fiscal years 1985 (20) and 1986 (27) are significantly above those of previous years.

During the year, cash sellers of livestock were paid $768,000 from 12 packers under the statutory trust. This brings the total paid to cash sellers to over $30.2 million since the adoption of the trust in 1976. This proven success was one of the factors which led Congress to provide similar protection to poultry growers and producers in the 1987 amendments to the Act.

SCOPE OF OPERATIONS

The production and marketing of livestock, meat and poultry is of significant importance to the economy. Producer receipts for livestock and poultry at $51 billion represents 39 percent of total cash farm receipts. The estimated market value added through slaughter, processing, and wholesaling is $11 billion, for a total value of $62 billion.

Currently, there are 1,740 posted stockyards; 9,680 registrants, including 7,000 market agencies/dealers and 2,680 packer buyers; approximately 6,500 slaughtering and processing packers; and an estimated 6,500 meat distributors, brokers, and dealers. There are also an estimated 265 poultry firms subject to the Act.

The programs of the Agency under the Act are divided into two major areas: Livestock Marketing and Packer and Poultry. The goal of the Agency under normal circumstances is to allocate its resources on approximately a 50/50 basis between the two major program areas. However, allocation flexibility must be maintained in order for the Agency to respond to changing conditions. As previously stated, the current financial situation in the industry has continued to demand additional resources be channeled to financial and payment program activities.

LIVESTOCK MARKETING

The focus in this program area is on payment protection, fraudulent schemes, false weighing, and trade practices of stockyards, market agencies and dealers. Major emphasis is given to payment protection and investigating fraudulent marketing practices.

Fraudulent practices include misuse of custodial funds and other custodial account violations; check kiting; false weighing; weight and price manipulation; switching of livestock; misrepresentation as to the quality, source, origin and health of livestock; market agents defrauding principals; and altering books and records.

The Agency is endeavoring to make its payment protection work more effectively by allocating additional resources to surveillance. This effort has been hampered, however, by having to handle payment and other financial failures as they occur in the industry.

Fostering open competition is also given high priority. Any practice, agreement or arrangement which excludes a potential buyer from bidding is a restraint of competition. Investigations often disclose apportioning of territories, agreements not to compete, and payoffs or kickbacks to buyers.

PACKER AND POULTRY

The primary responsibilities of the Packer and Poultry Division are to assure prompt and full payment to livestock and poultry producers; to foster open and free competition in the procurement of livestock by packers; and to prevent noncompetitive practices in the marketing of meat and meat products. High priority is given to assuring payment for livestock through bonding, solvency tests, and the statutory trust. The existence of the packer trust has helped substantially in reducing losses to producers who sell livestock on a cash basis to slaughtering packers.

MEAT PACKER CONCENTRATION

Packer concentration accelerated during 1987 particularly for fed cattle and lambs. This included the merging of specialized poultry firms and traditional red meat firms. These developments, along with innovations in procurement, slaughter, processing and distribution, have caused the Agency to periodically review its priorities.

The following packer concentration figures are based on 1986 slaughter and production data and take into account mergers through 1987: The top 4-firm concentration ratio for commercial cattle slaughter is estimated at 49 percent. This is virtually the same as the ratio for 1920, when unfair competitive practices in the industry led to passage of the Packers and Stockyards Act in 1921. Consideration must be given, of course, to the changes which have occurred in cattle production, feeding and slaughter since the time the Act was passed.

The top 4-firm ratio for the slaughter of fed steers and heifers is estimated to be approximately 64 percent. Boxed beef production for the top four firms accounts for an estimated 82 percent of the total. The 4-firm ratio for the slaughter of lambs is estimated at 66 percent. Again, it is emphasized that these estimates are based on 1986 slaughter and production, taking into account mergers through 1987.

Under the Hart-Scott-Rodino Act, firms, including meat packers, are required to submit premerger notification and information to the Department of Justice and the Federal Trade Commission. The Agency has and will continue to provide analyses, counsel, and information on industry structure, concentration, and other factors to the Antitrust Division of the Department of Justice in connection with proposed mergers of meat packers.

If and when livestock prices turn downward significantly, producers will no doubt focus more intensely on the concentration issue.

MEAT MARKETING

Investigations of commercial bribery and illegal brokerage in the marketing of meat continue to receive significant attention, with emphasis on the operations of meat brokers and wholesale meat distributors. Firms making payoffs to meat buyers enjoy a favored position over other suppliers who compete on the basis of service and the products sold.

In addition to payoffs to meat buyers, investigations have also revealed kickbacks to packer salesmen. Cases of this nature generally cover broad geographic areas and require a substantial commitment of Agency resources. P&SA works closely with other Government agencies such as the FBI, the IRS, and the Postal Inspection Service in these areas.

LIVE POULTRY MARKETING

The poultry program will take on added significance as a result of the 1987 amendments to the Act. The new administrative authority for enforcement of the prompt pay and poultry trust provisions of the Act will make said enforcement more efficient. It should be noted that the Agency will continue to encounter serious enforcement delays in carrying out its responsibilities with respect to the trade practice provisions of the Act, since such enforcement will still be through the courts.

A recent case, involving serious delays in weighing poultry, is a good example of the gross inefficiency and frustration encountered in the enforcement of the trade practice provisions of the Act involving poultry. This case was initiated in early 1983 and concluded in 1987, requiring substantial Agency and Justice Department resources.

FURTHER PROCESSING--RED MEAT AND POULTRY

Further processing continues to be a significant development in the industry. This term includes fabrication beyond wholesale cuts in the case of red meat, and of whole birds in the case of poultry. Also included are portion control (individual portions), the manufacture of specialty, convenience and partially-to-fully cooked products, ready-to-serve products, and the like.

The poultry industry got the jump on red meats, but the movement is well underway now in beef, pork and lamb. These developments have far-reaching implications from the production of live animals through to consumption. The Agency will keep abreast of the changes and modify its programs and priorities accordingly.

Boxed Beef Production: The proportion of fed beef which is boxed has continued to increase. Also, slaughtering packers continue to increase their share of total boxed beef production. Packers are now boxing and selling trimmed table cuts directly to retailers and are, also, initiating sales of precooked product.

Boxed beef production increased to 21.8 million carcass equivalents in 1986, 79 percent of the 27.6 million steers and heifers slaughtered that year.

SCALES AND WEIGHING

The major emphasis of the Agency's scales and weighing program continues to be directed toward weighing investigations. Economic pressure on individuals and firms engaged in livestock marketing contributes to falsifying weights as a means to improve income. This has prompted the Agency to increase the emphasis placed on scales and weighing. During fiscal year 1987, the Agency conducted 408 formal weighing investigations, with 73 (17.9 percent) of these disclosing false or inaccurate weights.

AGENCYWIDE INFORMATION MANAGEMENT SYSTEMS (AIMS)

The Agency continues to make progress in implementing its automated information management system. Many administrative processes are being fully automated. This past year the Agency implemented a fully automated time and attendance reporting system and a fully automated travel voucher reimbursement system is in its initial stages.

The unit which automates registration and bonding is now in place in the twelve regional offices. Also, a revised financial, risk-rating program is being implemented.

The expanded system will assist in pointing the work of the Agency in the direction of emphasizing surveillance as opposed to "mopping up" after violations have occurred, particularly in the financial areas. Further enhancement of the system will enable the agency to automatically process and evaluate annual reports submitted by over 8,000 packers, market agencies and livestock dealers. The packer reports are already in the system.

FISCAL YEAR 1989 BUDGET REQUEST

The total budget request of the Packers and Stockyards Administration for fiscal year 1989 is $9,562,000. Included is $9,434,000 for the administration of the Packers and Stockyards Act and $128,000 for "clear title." The net increase consists of $160,000 to annualize 1988 pay costs.

The request will provide funding for program activities at the 1988 level.

Mr. Chairman, the Agency appreciates the opportunity to present this statement. We welcome the opportunity to respond to any questions you and other members of the Subcommittee may wish to ask.

United States
Department of
Agriculture

Packers and
Stockyards
Administration

Packers and Stockyards Administration Fiscal Year 1989 Budget Review

Packers and Stockyards Administration:

Investigative and Law Enforcement Agency

Mission: The mission of P&SA is to assure the integrity of livestock, meat, and poultry markets and the market place

The programs of P&SA are designed: (1) to foster fair and open competition and guard against deceptive and fraudulent practices in the marketing of meat animals and the products therefrom under the Packers and Stockyards Act; (2) for certification of "central filing systems" established by States under Section 1324 of the Food Security Act of 1985.

Packers and Stockyards Administration
Overview

Size of Industry

• **Producer receipts livestock and poultry**	**$51 bil**	• **Market value added through slaughter, processing and wholesaling**	**$11 bil**
(39% of total cash farm receipts)		• **Total value**	**$62 bil**

Coverage of program

• **Scales**	**4,350**	• **Posted stockyards**	**1,740**
• **Packers S&P (650 bonded)**	**6,500**	• **Market agencies/dealers**	**7,000**
• **Other packers**	**6,500**	• **Packer buyers**	**2,680**
• **Poultry firms**	**265**		

Packers and Stockyards Administration

Areas of Responsibility

- Payment protection
  - Prompt payment - livestock, poultry and meat
  - Packer and poultry trusts
  - Custodial accounts
  - Bonds
  - Solvency
- Anti-trust activities
  - Competition
  - Conflicts of interest
- Unfair, deceptive, and fraudulent practices
  - White-collar crime
- Clear title
  - Issuing regulations
  - Certifying procedures

Packers and Stockyards Administration

FY 1989 Request - $9.5 Million

Agency Objectives:

- **Implement the prompt pay and poultry trust provisions of the Poultry Producers Financial Protection Act of 1987 in instances of clear failure to pay and financial failures**
- **Programs involving payment protection for livestock, bonding, packer trust, and custodial account surveillance maintained**
- **Major investigations involving white collar crime/fraud, unfair competition and deceptive practices continued**
- **Coordination with and assistance to other federal law enforcement agencies provided**
- **Programs to assure accurate scales and weighing maintained**
- **Certification of the "clear title" systems established and implemented under the Food Security Act of 1985 continued**
- **Enhancement of the Agency's information management system to improve productivity**

OFFICE OF THE SECRETARY AND DEPARTMENTAL ADMINISTRATION

STATEMENT OF JOHN J. FRANKE, JR., ASSISTANT SECRETARY FOR ADMINISTRATION

Mr. Chairman, members of the Subcommittee, once again I am pleased to appear before you to discuss the activities and fiscal year 1989 budget request for the Office of the Secretary, Departmental Administration, GSA Rental Payments and Building Operations, Advisory Committees, Hazardous Waste Management and the services provided to USDA agencies through the Department's Working Capital Fund.

OFFICE OF THE SECRETARY

As you know, Mr. Chairman, there is no single appropriation for the Office of the Secretary. The funding for the salaries and expenses of the 85 staff years which provide policy oversight and direction to the activities of the Department are contained in 11 separate appropriations. Ten of these, providing appropriations for Under and Assistant Secretaries, average less than $424,000. Only the Immediate Office covers more than five staff years.

Estimates of future costs at such a detailed level do not leave much margin for error. The reporting and recordkeeping requirements for each of these small appropriations are the same as for all other appropriations.

I ask that you consider granting the Secretary a consolidated appropriation. The flexibility to assign and redirect resources between the Offices as needed would enhance the Secretary's ability to carry out the goals and objectives of the Department.

The appropriation request for the Office of the Secretary would provide funding for the Secretary, the Deputy Secretary, the Under and the Assistant Secretaries and their supporting staffs. The fiscal year 1989 budget request for these activities totals $5,998,000. This is an increase of $288,000 above the current estimate for fiscal year 1988. The entire increase is to annualize the pay cost increase from fiscal year 1988.

While there is a realignment of resources within the Office of the Secretary to balance the staffing and funding to the responsibilities of each Under and Assistant Secretary, there is no net increase associated with this realignment. Data provided within this consolidated account structure will identify resources for each Deputy, Under, and Assistant Secretary in an individual budget line item.

The fiscal year 1989 request also includes funds to reestablish the Office of the Assistant Secretary for Natural Resources and Environment.

DEPARTMENTAL ADMINISTRATION

It's always a pleasure to talk about the programs in Departmental Administration. Since I first came to the Department, I have been impressed with the energy, resourcefulness and integrity of its managers. They are a dedicated crew, and they do a good job under difficult circumstances. This is especially true in Departmental Administration.

Within Departmental Administration, we are not content merely to reap the benefits of management initiatives begun several years ago. Increasing program effectiveness is a continuing process with us. We already conduct several programs that benefit USDA agencies by saving them time and/or money. For example, during fiscal year 1986 we initiated an automated procurement system that cuts down on the time it takes agencies to prepare and process contract documents. This technology was made available to agencies during fiscal year 1987 and is improving services in thousands of field offices nationwide. In addition, our cash management program saved approximately $3 million in interest payments during fiscal year 1987 through use of electronic fund transfer systems.

I'm proud of what we're doing in Departmental Administration. Our managers are leading the way in major government-wide initiatives. The President's Council on Management Improvement was so impressed with the consolidation of the forms warehouse function of USDA, the Department of Commerce, the Office of the

Special Counsel and the Merit Systems Protection Board, that USDA and Commerce were asked to lead government-wide consolidation efforts. The USDA Management Control Plan covering agencies' internal financial controls is being used by the Office of Management and Budget as a model for other Federal agencies. Our National Finance Center was asked to handle the implementation of the Thrift Savings Plan recordkeeping system for the entire Federal Government, and we are doing that effectively at no additional cost to USDA.

For fiscal year 1989 we will continue exploring ways to increase our productivity, foster excellence in the workplace, and provide the best possible administrative support to USDA agencies. We are requesting an increase of $152,000 to pay USDA's share of a national level program of emergency communications for the National Communications System. This payment supports development of the System by the Department of Defense. The remaining increase of $1,474,000 consists of $544,000 to annualize increased pay costs from fiscal year 1988 and $930,000 in program increases. This program increase is only 3.7 percent above the fiscal year 1988 appropriation. Together these increases total $1,626,000, a nominal investment, but one that will pay off. The initiatives we will undertake will have a direct bearing on the effectiveness of USDA agencies and will contribute to the efficient operation of the Department's programs.

Specifically, we are asking for resources for the following initiatives:

- An increase of $200,000 to expand the pilot EEO Counseling program to field locations and to assist in monitoring compliance with EEO directives and plans. We initiated a pilot program in fiscal year 1987 to provide counseling and mediation services to resolve EEO complaints prior to formal filing. We consider this approach a common sense way to improve relationships with our workforce, head off problems, and ultimately reduce costs. Preliminary results from the pilot show that more than 90 percent of complaint contacts were resolved without a formal filing. It is anticipated that under the expanded project, a majority of all complaint contacts will be handled informally. Thus, for a minimal investment, USDA would dramatically reduce the number of formally filed, costly, complaints. In addition, it would also improve oversight, technical guidance, regulatory compliance, and reporting.

- An increase of $185,000 to upgrade budget and fiscal support services to the Office of the Secretary and Departmental Staff Offices, and to provide oversight and assistance to USDA agencies to reach the goal of at least a 20 percent increase in productivity. The added resources are essential to improve services, tighten oversight of resource utilization, and meet the demands of deficit reduction through increased productivity.

- An increase of $207,000 to assess Departmentwide motor vehicle management and to increase the level of procurement, and real and personal property reviews to ensure we are getting the goods and services paid for, that personal property is inventoried and disposed of properly, and that real property is efficiently managed.

- An increase of $228,000 to develop a telecommunications strategic plan and Information Resources Management standards, review agency management of telecommunication resources, and to promote better management of information resources including software management. USDA spends $150 million annually on telecommunications. The additional funds will insure a continued high quality of field automation and ADP support services for our agencies.

- An increase of $110,000 for additional staff in the Office of Administrative Law Judges. This is necessary to handle the 45 percent increase in hearing caseload and certifications due to recent court decisions and legislation.

RENTAL PAYMENTS AND BUILDING OPERATIONS

The larger of these two appropriations finances a portion of the Department's payment to the General Services Administration for space and related costs. In fiscal year 1989, the Department requests $56,407,000 for its space inventory. The fiscal year 1989 request is $6,742,000 over the current fiscal year level of $49,665,000.

Departmental staff and support services to operate and maintain the downtown Headquarters complex are funded through the smaller appropriation under this heading. For fiscal year 1989 the request is $22,429,000, a net increase of $2,317,000 over the current fiscal year level of $20,112,000.

Program increases of $5,509,000 will be partially offset by a reduction of $3,245,000 for the one-time purchase of systems furniture in fiscal year 1988. The major portion of the program increase is $2,875,000 to cover utility rate increases and contract price adjustments attributable to the Fair Labor Standards Act and the Services Contract Act, as well as other cost increases due to contract renewals.

Additionally, the increase includes $434,000 required to cover new water and sewage charges levied by the District of Columbia, as well as the resumption of services to the Auditors Building once renovations are completed.

An additional $2,200,000 will be used to convert underutilized basement and attic space in the South Building to office space. We estimate that each 10,000 square feet of space converted saves approximately $200,000 to $300,000 per year in space rental.

The remaining increase of $53,000 is for FY 1988 pay costs annualized in fiscal year 1989.

ADVISORY COMMITTEES

USDA Advisory Committees, other than those funded from the Forest Service appropriation or from user fees, are funded from a single appropriation originally established by the Congress in the fiscal year 1983 Appropriations Act. The initial appropriation was $1,398,000. The fiscal year 1989 request is $2,294,000, a net increase of $986,000 above the fiscal year 1988 level of $1,308,000.

Included in the increase is $1,000,000 for the continuation of the National Commission on Agriculture and Rural Development which was authorized by the Food Security Act of 1985. Also, the increase provides funding for the new Dietary Guidelines Advisory Committee and a new National Advisory Committee on Microbiological Quality Standards for Food. These increases are offset by reductions in the operating costs for other committees. The funds for fiscal year 1989 will permit the operation of 39 advisory committees including the National Commission.

HAZARDOUS WASTE MANAGEMENT

This program is designed to promote USDA facility compliance under the requirements of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) and the Resource Conservation and Recovery Act (RCRA). These Acts require Federal agencies to meet the same standards for storage and disposal of hazardous waste materials as private businesses. The funds provided for this program enable USDA to address problems posed by past hazardous waste disposal practices and to deal with the current regulation of hazardous substances.

The FY 1988 appropriation established a central fund for hazardous waste activities. Resources are allocated to USDA agencies according to priority of need. This approach allows the Department to correct compliance problems in a systematic way. For fiscal year 1989, we are requesting $10.0 million for this program to be available until expended. This is an increase of $8.0 million above the $2.0 million appropriated in fiscal year 1988.

This year's request is based on an analysis of site assessments that are needed in fiscal year 1989 to contain or clean-up hazardous wastes in selected areas. A Department survey has identified USDA facilities where contamination of ground and/or surface water exists or where release of hazardous substances have occurred.

For fiscal year 1989, an $8 million CERCLA program will be directed toward the necessary preliminary assessments and site investigations. The estimated average cost of a preliminary assessment is $15,000. The cost to conduct an on-site investigation averages $50,000. At those sites where remedial action is needed, we must first conduct a feasibility study. This step starts at $500,000 and can increase based on the time needed to carry out the study and complexity of the problem. Remedial action will be taken at a limited number of sites. Based on the results of our survey, Mr. Chairman, we estimate that an increase of $6.0 million over the fiscal year 1988 level will be needed.

The RCRA program of $2.0 million will be directed towards bringing the Department's inventory of over 2,000 storage tanks into compliance with the law. A majority of these are old enough to require removal and replacement. Many will have to be rebuilt to come into compliance at an average cost of between $5,000 to $10,000 per tank. Plus, there is the cost of removing and reinstalling these tanks. To simply replace a tank costs about $25,000. Fifty-four tanks surveyed in one area alone would cost an estimated $1,140,000 to replace or repair. We are just beginning to address this problem. So, we have to do the field surveys, test for leaking tanks, move to phase out the older ones, and remove the contaminated soil.

WORKING CAPITAL FUND

Mr. Chairman, in the years I have come before the committee to discuss the Departmental Working Capital Fund, I have talked about the need to find innovative ways to provide administrative and financial management services at low cost. I am pleased to say that the success we have had, especially in the past year, in developing and implementing those innovations will serve us well as we look forward to fiscal year 1989.

One of our most innovative accomplishments in the past year, and one which figures prominently in our plans for fiscal year 1989, is the "National Computer Center." This year, we moved to consolidate at Kansas City our mainframe computer operations in Washington, D.C. and Kansas City. The consolidated Kansas City facility offers long-term cost savings in ADP services when compared to the costs of managing two separate computer centers.

As a matter of fact, the National Computer Center/Kansas City is already paying dividends. Originally estimated to cost $40.9 million in fiscal year 1988, we expect that the actual costs will be less as a result of savings in personnel, contract, and equipment lease costs despite the workload increase resulting from consolidation. For fiscal year 1989, we estimate costs to be $33.5 million.

Regarding service quality in the new configuration, users in Washington will see no difference in service. In fact, Washington users will see improvements as more up-to-date technologies are brought on line.

One of our greatest ongoing successes has been the performance of the National Finance Center in New Orleans, Louisiana. In its capacity as provider of centralized financial management, accounting, administrative payments, personnel, property management, and recordkeeping services, the Center is the largest Working Capital Fund activity. As you know, the Center embarked on a program called "cross-servicing" in Fiscal Year 1985.

Inspired by Reform '88 and other management initiatives, this program enabled the Center to provide centralized administrative services to non-USDA agencies at a cost lower than those agencies would pay for those services performed in-house or elsewhere.

Last year, the Center provided service to sixteen Government agencies, generating income to USDA of $7.7 million. We expect income this year, from the same users, to reach almost $13 million. The effect of this, Mr. Chairman, is to spread fixed costs of Center operations over a larger user population, thus lowering the share of such costs each user must pay. Total costs for each user, therefore, are lower than they would be without these non-USDA clients.

In fiscal year 1989, we expect that sixteen Government agencies will be using the National Finance Center, generating income of $15.4 million. If more agencies come on-board, the income figure will be higher, and the benefits to USDA and other agencies will increase. Included in the income estimate is income for services provided to the Federal Thrift Investment Board. The Center will continue fulfilling its recordkeeping responsibilities for the Thrift Savings Plan component of the Federal Employees Retirement System, and will be processing the Loan Operations Program of FERS as well in FY 1989. I should hasten to point out, Mr. Chairman, that the incremental costs incurred by bringing on new users - personnel, supplies, and the like - are borne by those non-USDA users receiving services, not by USDA.

As you will recall, Mr. Chairman, USDA embarked on an ambitious plan in fiscal year 1985 to restore the Fund to a strong capital position. This plan could never have been possible without the cooperative efforts of the Congress. I am pleased to inform the committee that the Fund today is in a much stronger position than it was prior to fiscal year 1985.

Fiscal year 1989 represents the last planned installment of the multi-year plan. If Congress appropriates the full $6,000,000 for capital acquisitions in fiscal year 1989, we estimate that the Fund will have available $19,503,000 in resources for capital acquisitions. Given anticipated procurements in fiscal year 1989, we expect that purchases made from the $19.5 million will enable USDA to avoid $19,865,000 in unnecessary costs over the life of this equipment. These cost avoidances represent the difference between what users will pay for equipment, depreciated over its useful life, and what they would otherwise pay for leases of the same equipment if the capital restoration plan were not in force.

These represent the most visible accomplishments and most important activities to be implemented under the Fund in fiscal year 1989. They should not obscure, however, the effectiveness with which other activities under the Fund have served USDA and will continue to serve in fiscal year 1989. Our efforts to provide central administrative services such as mail, supply management, and property management; audiovisual services such as video and film, and visual design services; and other ADP services such as computer support for Departmental staff offices and telecommunications services have been, and will continue to be improved.

We will also continue to employ those oversight mechanisms which have served the Fund and the Department so well since instituted in fiscal year 1982. For example, the Comptroller of the Fund, who has day-to-day responsibility for Fund oversight, will continue to conduct regular reviews of Fund finances and those reviews which are necessary on an ad hoc basis. The Working Capital Fund Interagency Review Board, made up of seven high-level management officials from user agencies and a permanent representative from the Departmental budget office, will continue to provide the user perspective so necessary to insure effective service delivery and prudent financial management. As the official responsible for the health of the Fund, I will do my part to insure that users both inside and outside of USDA will be well served by Fund-supported activities, and that costs to USDA will be held to the lowest level possible.

Mr. Chairman, given the needs of the Fund in fiscal year 1989, and the record of service built by Fund-supported activities in recent years, I believe that our proposed funding level of $128,470,000 for the Working Capital Fund in fiscal year 1989 is consistent with our efforts to manage effectively in an era of budget restraint. This figure includes an estimated $17.8 million in cross-servicing costs, to be borne by non-USDA agencies. It does not include an estimated $19,503,000 in capital availability.

Mr. Chairman, this concludes my prepared remarks. If the committee has specific questions, I will be glad to answer them.

OFFICE OF TRANSPORTATION

STATEMENT OF MARTIN F. FITZPATRICK, JR., ADMINISTRATOR

Mr. Chairman, Members of the Committee, I appreciate the opportunity to appear before you today to discuss the rural and agricultural transportation situation. With me are Dr. Wesley R. Kriebel, my Deputy Administrator, and Kevin Shea, Chief of the Program Analysis Branch of the Budget and Accounting Division for the Animal and Plant Health Inspection Service (APHIS). APHIS provides budget and other administrative support for the Office of Transportation.

Proposed Agency Elimination

The Fiscal Year 1989 budget proposes to eliminate OT by September 30, 1989. Although we are very proud of the many accomplishments of the Agency during its nine years of service, we recognize that the Federal budget deficit must be reduced and that difficult choices must be made. One of those choices was to phase out OT by 1990. Therefore, we will use the $1,372,000 requested for Fiscal Year (FY) 1989 to complete some studies and arrange the termination of the Agency.

Problems in Rural Transportation

I would like to take a few minutes to give you my perspectives on the major transportation problems facing rural America. Those problems could be broadly characterized as physical problems and as gaps in service.

The physical problem is the continuing deterioration of the rural transportation system. Roads and bridges in rural America are falling apart. Public investment in rural roads and bridges—the lifeline for America's agriculture and its farmers--has slowed. Its impact is felt by all Americans through higher prices caused by higher transportation costs, through a hinderance of mobility, and through delays in moving farm products to markets. Everyone has a stake in the rural transportation infrastructure and I hope that by keeping the issue before the public a greater awareness will lead to more results.

Gaps in Service

The second major problem area is what I term gaps in service. Rural Americans, particularly those directly involved in agriculture, depend on the transportation industries. Deregulation of railroads, trucking, and bus lines has had a mixed effect. While large agricultural shippers benefit from the economies made possible by deregulation, the smaller shippers and the average rural resident have faced new problems. Railroads have abandoned unprofitable lines and have instituted procedures to minimize the time rail cars are not actually carrying loads. The results are that some areas have lost their only rail link to markets and some farmers cannot afford to pay shipping costs or in some cases even find a railroad which can supply cars. For example, sunflower producers in North Dakota are finding that no rail-owned cars are available to ship their products to Mexico. Other shippers are finding that they will have to pay a large surcharge to ship by rail. Deregulation overall is good for the country, but these are examples of gaps in service that should be addressed. Our goal is to make deregulation work for agriculture.

Deregulation of bus lines has had a similar effect. Large bus companies are abandoning many rural lines which they view as unprofitable. This leaves thousands of rural Americans with no way of getting to the non-farm jobs--which many farmers now take--or to the types of services that we in cities take for granted, including medical services. I point out this problem not to condemn deregulation--which has benefitted our national economy--but to create an awareness about rural Americans and their unique needs.

Having noted some concerns resulting from deregulation, I would like to turn to the ironic situation involving a new regulation. The proposal to institute a single commercial driver's license could place an additional burden on rural Americans. Designed to hit at the problem of poor drivers in the interstate trucking business, the regulations as proposed apply to farmers who drive to market a few times per year or transport pesticides for personal use. We are discussing the concern with the Department of Transportation to try to perhaps reach a more reasonable requirement for farmers.

Recent Accomplishments

We have focused our efforts on the major problems I have mentioned. To address the rural road and bridges problem we studied alternatives for rural highway financing, a study which we reported to the Congress in August 1987. We are currently surveying State and local governments to develop a comprehensive picture of needs, revenue sources, and the myriad of intergovernmental relationships which are involved in road construction and funding. From the technical-assistance perspective, we sponsored workshops on contemporary timber bridges, including the erection of two bridges.

We remained heavily involved in helping to find ways to fill the service gaps I spoke of earlier. Our work in preventing rail line abandonments included a successful plan to preserve a 24-mile rail line in Mississippi that had been scheduled for termination. We are currently working on a plan to preserve a 37-mile line in Iowa. During FY 1988 we will complete a study on the rail car shortage situation.

Working with the United Bus Owners of America, we began a group of meetings to discuss the passenger bus line abandonment problem. This cooperative endeavor will continue in FY 1988, with the goal of identifying solutions. Similarly, we are working with the Department of Transportation to minimize the impact of the commercial driver's license upon the agricultural community. This will follow up on our official request for exemptions sent to DOT last year.

In FY 1987 we continued our activities in the international arena as part of the effort to enhance exports. We completed a study of the Pacific Rim countries, including China. As we encourage developing this potentially lucrative market it is important to understand the transportation hurdles that we will have to overcome. Our study identifies the problems as well as the opportunities. We also studied port capacity at Puerto Quetzal in Guatemala. The port's limited capacity could prevent U.S. wheat and other commodity suppliers from accessing this market. Our study, conducted with Guatemala representatives, helped to identify how the port could be improved to meet importing needs.

We also provided technical assistance to American exporters. For example, we completed a Tropical Products Handbook to help explain methods of transportation to and from the Caribbean. We completed an Ocean Liner Service Directory which provides information on services available to agricultural shippers. We also revised our handbook entitled Protecting Perishable Foods During Transport by Truck, a popular and widely used reference book particularly within the fruit and vegetable industry. Many shippers and receivers including some Federal agencies cite this handbook in their shipping contracts as the authority on handling requirements for perishable products. Additionally, our traffic managers answered hundreds of calls for advice and assistance on individualized problems.

Mr. Chairman, it is difficult for an Administrator to recommend elimination of the agency he is responsible for, but I understand that certain difficult decisions must be implemented in order to get the budget under control. OT has developed a strong base of knowledge that will remain available for use by other Federal and State agencies and private organizations as they deal with the problems of rural and agricultural transportation.

WORLD AGRICULTURAL OUTLOOK BOARD

STATEMENT OF JAMES R. DONALD, CHAIRPERSON

Mr. Chairman and Members of the Committee, it is my pleasure to appear before you today to discuss the fiscal year 1989 budget request of the World Agricultural Outlook Board.

Overview

The World Agricultural Outlook Board (WAOB) plays a critical role in the U.S. Department of Agriculture's (USDA's) ongoing effort to ensure that its commodity information system responds to today's rapidly changing world agricultural sectors. The purpose of the WAOB is twofold: to provide the most accurate, objective, and timely economic intelligence on worldwide developments which influence U.S. agriculture; and to speed the flow of that information to producers, consumers, policymakers and the general public.

WAOB's main function is to coordinate and review for accuracy and consistency all USDA estimates and analyses relating to international and domestic commodity supply and demand conditions. WAOB maintains liaison with international organizations, such as the World Meteorological Organization, and domestic agencies, such as the Commodity Futures Trading Commission.

WAOB is the Department's focal point for weather and climate information and weather-based impact assessment; these monitoring activities within USDA are coordinated by the WAOB Chairperson. Remote sensing activities in USDA are coordinated by the WAOB Chairperson. Remote sensing has the potential to improve the accuracy and timeliness of crop estimates.

Specific Functions and Progress

WAOB has continued to improve its ability to integrate information from the Department's world agricultural intelligence system. WAOB chairs the Interagency Commodity Estimates Committees (ICEC's) and seeks to expand each ICEC's analytical role in current condition and impact assessment. These committees include representatives of the Economic Research Service (ERS), Agricultural Stabilization and Conservation Service (ASCS), Foreign Agricultural Service (FAS), Agricultural Marketing Service (AMS), and WAOB.

All committee members are USDA professionals with responsibility for developing official estimates of supply, utilization, and prices for the major agricultural commodities. It is through the interagency membership of these committees that the various USDA agencies work together in a coordinated effort. Development and use of new analytical tools and evaluation of forecasting performance are ongoing responsibilities of each committee.

Weather, as much as any economic or policy development, continues to be a significant and most unpredictable variable underlying agricultural production and prices. Consequently, USDA places a high priority on incorporating weather-based assessment information into all analyses. The focal point is the Joint Agricultural Weather Facility (JAWF), operated jointly by the WAOB and the National Oceanic and Atmospheric Administration (NOAA). This facility, located in the South Agriculture Building, continually monitors and assesses global weather events and their probable impact on agricultural output. JAWF briefings, reports and special alerts are key inputs to ICEC and WAOB deliberations.

The Weekly Weather and Crop Bulletin and electronic networks are the principal means used by JAWF to disseminate meteorological assessments to the public. JAWF's early warning capability diminishes the likelihood that USDA policy makers, farmers and other participants in the agricultural system would be caught off guard by a foreign crop failure or some other significant global weather-related event. The Weekly Weather and Crop Bulletin is widely recognized as a prime source of reliable domestic and international crop and weather information.

The World Agricultural Supply and Demand Estimates report (WASDE) is published by WAOB. WASDE is a monthly report which is released on the same day as the U.S. Crop Production report. WAOB has tailored this report to respond to end-use needs for global crops and livestock situation and outlook information on a timely basis. WASDE presents aggregated global supply and demand data for all major agricultural commodities and shows detailed production, trade, utilization and stocks forecasts for the United States and for principal U.S. competitors and markets.

WAOB recognizes the need for rapid information dissemination. Increasingly, improved technologies are being used to speed the flow of information. The principal objective is to place the World Agricultural Supply and Demand Estimates report into the hands of farmers and other users as quickly and effectively as possible. WASDE is now transmitted electronically upon release at 3 p.m. to a central USDA system that can forward it to all interested users, greatly broadening the potential for report dissemination. Also, the report summary is now being sent electronically to our embassies and trade offices around the world to keep U.S. agricultural attaches, counselors, and trade representatives current with the very latest information on U.S. supplies and prices.

The Agricultural Statistics Board (ASB) of the National Agricultural Statistics Service and the WAOB are co-located in a single lockup facility to maximize security conditions for compilation and analyses of world crop data and supply/demand estimates. This physical arrangement with the ASB facilitates interaction between domestic and international analysts.

Recent Activities

The WAOB continued its efforts to improve USDA's economic intelligence system and to gain additional public confidence in USDA's analyses and forecasts. Actions by the WAOB to strengthen the interagency process have significantly improved the Department's analytical base for commodity forecasts and policy assessments. Expanded interagency participation and greater utilization of subject matter specialists have improved the performance of the ICEC's in terms of both quantity and quality of output.

WAOB performed numerous commodity analyses examining domestic and trade policy issues at the request of the Administration, Congress and private industry. For example, the WAOB, with interagency assistance, prepared a detailed assessment of existing supply and use data for peanuts. Domestic food use estimates, the key series in setting the quota for edible peanuts, were revised and a new series adopted. USDA's revisions were strongly embraced by both the Congress and private industry.

Similarly, the WAOB led an interagency effort to quantify protein and grain feeding demand relationships for major importing countries. This work is expected to result in more reliable short-term forecasts and long-run projections of foreign feed consumption and imports.

In response to an industry request, WAOB directed an interagency study which analyzed the "Ability of the United States to Supply Cotton for the Export Market to the Year 2000." As a result of this study, USDA has a much stronger basis for the foreign supply and demand projections which underlie U.S. 5-year cotton export projections.

To improve its information base, WAOB expanded its contacts with other agencies within and outside the Department, private industry and universities. WAOB analysts presented papers at the request of special interest groups, participated in regional outlook conferences sponsored by state universities and attended numerous commodity association meetings.

Substantial progress was made in improving the data base and early-warning capabilities of the Joint Agricultural Weather Facility. For example, the JAWF obtained historical data on Soviet grain area, yield and production at the oblast (county-equivalent) level which was previously unavailable to USDA. As more recent data becomes available, it will be used by JAWF to establish the relationship between yields, weather and newly adopted Soviet technologies. For the 1987/88 crop year, the JAWF closely monitored, analyzed and reported on the condition of the Soviet winter wheat crop, including the very dry fall, the severely cold winter and the extremely wet spring. Analyses of historical data included an in-depth study of past years with similar weather conditions and associated declines in yields. As a result, USDA analysts accurately forecast a substantial decline in 1987 Soviet winter wheat production well in advance of Soviet indications. As the year progressed, USDA's assessment of total grain output in the USSR proved to be very timely and extremely accurate.

Using techniques similar to those described above, JAWF provided an early warning concerning the impact of record heat and drought on crop production in India. This timely and accurate assessment served as the basis for government-wide briefings.

As coordinator of remote sensing activities within the Department, the WAOB presented testimony to Congress giving USDA's position with respect to the privatization and potential loss of Landsat data. In preparing the testimony, the WAOB conducted extensive liaison with other departments and, internally, coordinated fully with involved USDA agencies. The WAOB clearly stated the Department's strong support for commercialization and cost reductions while expressing to OMB and Congress the need for remotely sensed information for commodity forecasts.

The Department established closer ties with the Commodity Futures Trading Commission, particularly in the area of price surveillance where USDA analysts now attend weekly meetings. WAOB was designated as the lead USDA Agency in working with the Commission to monitor futures.

The WAOB planned, organized and directed USDA's Agricultural Outlook '88 Conference, which resulted in a most successful program consisting of 30 sessions, 100 moderators and speakers and 1,100 registrants.

Budget Request

Our total budget request for fiscal year 1989 is $1,906,000. This represents an increase of $176,000 above the fiscal year 1988 level of $1,730,000. This increase consists of $30,000 for annualization of the pay increase effective in fiscal year 1988, $70,000 for economic analysis and coordination of supply and demand estimates, $60,000 for meteorological data base expansion to improve crop forecasting and $16,000 for increased operating costs.

This funding would enable the WAOB to improve USDA long-range commodity projections. The focus will be on improving the accuracy of longer-term commodity supply and use projections which have been mandated by legislation and which underlie USDA budget estimates. The WAOB would lead this effort, as is already the case with the short-term or 1-year forecasts, by working closely with the principal economic analysts from all participating USDA agencies.

The use of weather data in USDA's international crop yield estimates is a major objective of the WAOB/NOAA Joint Agricultural Weather Facility. Additional meteorological data and analyses are needed to quantify the combined effect of weather and new technology on crop yields, particularly for countries such as the Soviet Union. Domestically, additional effort needs to be undertaken to provide more reliable and timely weather data to U.S. farmers.

This concludes my statement, Mr. Chairman. My associates and I are prepared to answer any questions you may have concerning the WAOB programs and budget request.

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